

DESIGN-BUILD PRACTICE REPORT

Appendix 7 – Completed Surveys

SEPTEMBER 2002

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

GEORGE E. PATAKI, Governor

JOSEPH H. BOARDMAN, Commissioner



DESIGN-BUILD PRACTICE REPORT

Appendix 7 – Completed Surveys

PREPARED BY

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

FOR

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

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ACTA

DESIGN BUILD INDUSTRY PRACTICE SURVEY

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Date : 1/09/2002

1. GENERAL INFORMATION

- 1.1** How is design-build used by your Agency?
The Alameda Corridor Transportation Authority has used design-build for a single, but significant, contract, as an integral part of its plan for delivery of the Alameda Corridor-- a rail/grade separation project connecting the Ports of Los Angeles and Long Beach to rail yards and other transportation facilities in central Los Angeles. ACTA is a joint powers agency formed by the Cities of Los Angeles and Long Beach to finance and develop the Alameda Corridor project.
- 1.2** Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.
See above.
- 1.3** Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?
In 1998 the Authority entered into a \$712M design-build contract for the middle section of the Alameda Corridor. The Corridor is scheduled for completion in April, 2002, with the remainder of the project scheduled for completion several months thereafter. The mid-corridor project represents about 70% of the Authority's construction budget, with 13 other construction contracts included in the program. The Mid-Corridor Project includes a 10-mile, 33' deep trench, extending from a point north of State Route 91 to a location near 25th Street in Los Angeles. The trench represents about two-thirds of the Authority's construction program. The project also includes construction of a rail line immediately east of the existing tracks and the future trench, allowing trains to continue through the area while the trench is under construction. The project also includes improvements to Alameda Street, with bridges constructed to carry street traffic over the trench at 29 crossings. In addition, left-turn pockets will be added and other roadway improvements made at several locations. The Authority does not anticipate using design-build for future projects.
- 1.4** Why did the Agency initiate its design-build program?
It was a combination of an immediate need for the project and requirements imposed in connection with the Authority's plan of finance. Specifically, the plan of finance involved the sale of revenue bonds, and in order to keep interest expense within an acceptable range the project had to be completed within a certain time period. This

time constraint, combined with the critical need for the project to be completed, required the Authority to use design-build.

- 1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

The joint powers agreement that formed the Authority provides for the Authority to comply with the restrictions on exercise of its powers that are applicable to the City of Los Angeles. The design-build contract procurement was based on a Los Angeles City Charter provision (Section 386(f)) allowing certain contracts to be negotiated with the proposer offering the "lowest ultimate cost." Please note that the Charter has since been revised.

The charter provision required a City Council ordinance to be adopted permitting use of this procurement process. The Authority obtained authorization from its Board as well as passage of a City Council ordinance. (Los Angeles City Ordinance No. 171676, ACTA Board Resolution JPA 6-97 and 27-98.)

There are no relevant internal policies and procedures regarding the procurement process.

- 1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

No. In fact the initial impetus for consideration of design-build came from by an unsolicited proposal from Brown & Root/SP/Parsons. The Authority addressed potential concerns regarding bid shopping and bid peddling by the design-builder by requiring use of a competitive process for selecting any subcontractors over \$3,369,500 [½ of 1% of the difference between the original Contract Price and the portion of the original Contract Price allocated to design services].

- 1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

Absolutely. We have a project.

- 1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

Need for accelerated schedule.

- 1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

Nancy Smith will provide the procurement and contract documents to you.

Pre-qualifications and technical proposals were reviewed on a pass-fail basis. There were evaluation forms but no formal evaluation procedures.

We provide monthly progress reports to the lenders. See attached sample.

- 1.10 Do you plan to proceed with additional design-build projects? If not, why?

No. No candidates.

2. PROJECT BACKGROUND

- 2.1 Identify your project(s) and design-build team member(s) for each project.

Alameda Corridor Mid-Corridor Design-Build Project

Tutor Saliba Team—joint venture of Tutor Saliba Corporation, O & G Industries, Inc., Parsons Transportation Group, and HNTB Design-Build, Inc.

- 2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

initial: \$712M

current: \$770

~1/3 was for increased quantities of dirty dirt
 ~1/3 owner directed changes to the basic project configuration
 ~1/3 additional scope—some work that was added was originally planned to be included in separate contracts, one \$7M sewer project was added to the program

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

1. time
2. price certainty (keeping the project within budget)
3. quality work product
4. reduce impacts to adjoining properties
5. share with adjoining communities the benefit of jobs available as a result of the project.

2.6 Did design-build help the Agency meet its goals? How?

It definitely helped in the first two goals—time and price certainty. As to 3 and 4 (quality and reduction of impacts) design-build probably had no effect. As to no. 5, a training program was included in db contract. The db contractor was required to train 1,000 individuals living within a particular area—650 trades, 350 non-trade related.

2.7 Describe the process used to identify risks and minimize the impact of risks.

The Authority set up a Steering Committee to make decisions regarding the design-build procurement process and contract terms and conditions. The Committee members included high level representatives from both Ports, as well as ACTA senior management. ACTA's program manager and attorneys attended these meetings and provided technical support and recommendations to the Committee. Railroad representatives were also invited to the meetings.

One of the Committee's first tasks was a workshop to discuss risk allocation. The decisions made during this workshop were revisited many times—as the documents were drafted, in response to the industry review comments, and in response to questions received during the pre-proposal period.

During one-on-one meetings with the pre-qualified contractors (prior to issuance of the RFP) we obtained input from the pre-qualified contractors as to cost drivers and risks that they were not willing to take on. As a result of the industry review process the Authority re-examined its approach to risks associated with utility relocations, agreements with the Corridor cities, and hazardous materials remediation. Once the documents were issued, industry comments resulted in some shifting of risks back to the owner.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?

Yes--18-20 months, according to an analysis prepared by the program manager

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

The project cost impacts are unclear. We probably paid for risks that didn't materialize; on the other hand the schedule acceleration reduced interest expense and made the project feasible.

2.10 How was the project funded?

Port Contributions	\$ 394,000,000
Federal Loan	400,000,000
MTA Grants	347,000,000
Series 1999 Senior Lien Bonds	1,000,000,000
Series 1999 Subordinate Lien Bonds	163,000,000
Other Sources	124,000,000
Total Sources	\$2,428,000,000

The bonds and federal loan are to be repaid from user fees payable by the railroads for use of the Corridor.

- 2.11** Did funding issues affect the procurement process or contract terms? If so, please explain.

The fact that the project was funded with revenue bonds was interconnected with the decision to use design-build and also with decisions regarding risk allocation.

- 2.12** Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

The project is not phased or segmented. However, it became apparent prior to award that the finance process was lagging behind the contract, and it became possible for the Authority to issue a limited notice to proceed to the contractor during the pre-finance period. Also, the design-build contract includes interfaces with other contractors. The design-build contract is required to coordinate its work with theirs, and to work around any delays in completion by other contractors, to the extent feasible.

- 2.13** Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

Stakeholders include:

- *Ports of Los Angeles and Long Beach—they are represented on ACTA's Board, participated in Steering Committee meetings and provide staff to ACTA. In addition, the contractor was obligated to obtain permits from the Cities of Los Angeles and Long Beach for certain work, and obtained appropriate design approvals from them for such work.*
- *UP and BNSF Railroads—The railroads, as the ultimate users of the Corridor, are major stakeholders. They provided much of the right-of-way for the project and have entered into agreements with the Ports and ACTA establishing the parameters for design, construction and operation of the Corridor. They have design approval rights and the right to inspect construction performed under the design-build contract.*
- *Public at large*
- *Corridor cities—benefited from grade separations and urban enhancements*

ACTA also dealt with numerous other entities, including utility companies, developers and environmental groups.

3. PROCUREMENT PROCESS

- 3.1** Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

The Authority invited shortlisted, qualified teams to submit proposals, reviewed technical proposals for responsiveness, determined the variable costs to the Authority associated with the different proposals, and added that cost to the proposal price. The proposer offering the lowest ultimate cost was selected for negotiations. Through the negotiation process, the Authority obtained clarifications to the proposal, updated the contract requirements to include matters such as final agreements with utility companies affecting the project, and modified the scope in certain respects to obtain a contract price reduction.

RFQ issued August 15, 1997

SOQs received September 2, 1997

shortlist approved November 20, 1997

industry review process

RFP issued January 21, 1998

Addenda 1 through 4

ATC reviews March –June 1998

Proposal Due Date July 1, 1998

Selection for negotiations August 13, 1998

Addendum 5 issued October 1998

Signed contract October 23, 1998

- 3.2** Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.
Without an industry review we believe we would have received fewer proposals. We delivered contract summary plus select concept schematics to the shortlisted teams. The industry review resulted in some changes to risk allocation—differing site conditions, utilities and City—no technical changes.
- 3.3** How many firms were shortlisted? How many proposals were received?
6 teams were pre-qualified, 3 proposals received
- 3.4** Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).
Contractor selected for negotiations based on a lowest ultimate cost determination (based on the sum of the contract price plus differential costs to ACTA associated with each proposal).
- 3.5** If negotiations were part of the process, were they useful? Please explain.
Negotiations were critical because of the “lowest ultimate cost” selection requirements and the need for an expedited procurement process in order to meet the overall project schedule. Had ACTA had the legal ability to go through a discussion and best and final offer process with all of the proposers, it would have taken additional time and might have resulted in a less beneficial deal.
The negotiations resulted in a \$20M reduction in the contract price, allowed ACTA to update the contract requirements to reflect matters such as agreements with third parties that were finalized after the proposal due date, and permitted ACTA to obtain modifications to the proposal clarifying various matters including the contractor’s plans to provide job training.
- 3.6** If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.
N/A
We did obtain a supplement to the selected contractor’s proposal, documenting the results of the negotiations.
- 3.7** Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.
The RFP allowed proposers to propose changes to the trench concept. ACTA approved about one-half of the Alternative Technical Concepts (ATCs) that were proposed. This process could have led to savings, but in fact none of the ATCs were incorporated into proposals.
An additional benefit from this process is that it makes the contractor “buy in” to the underlying technical concepts. If it ultimately became apparent that there were inherent deficiencies in the underlying design, the contractor had the opportunity to propose a different concept and therefore has no grounds for complaint.
- 3.8** Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?
No. ACTA agreed to share 10% of its share of any savings if an unsuccessful proposer’s ATC was ultimately used by the successful proposer, up to a cumulative sum of \$500,000 for each proposer.
- 3.9** Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?
About 12 individuals reviewed the proposals (including technical as well as legal). The process took less than six weeks. July 1 proposal due date, went to Board to approve selection for negotiations on August 13.
- 3.10** Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present

value, how options were considered, was schedule a factor, fixed price-best proposal)

N/A

See 3.4

3.11 Were there any protests? If so, please describe the circumstances and results.

No

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

It was issued 1-1/2 years prior to issuance of the RFP (May 1996)

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

We would want to use an industry review process and have the ability to negotiate. Also, we issued a compiled and updated set of questions and answers prior to the proposal due date—this required us to make sure all of the issues had in fact been addressed, and clarified the record.

We would want to consider having one-on-one meetings with the proposers after issuance of the RFP.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?
5 – 15%

We included a set of 100% plans in the contract for a Bypass Track, and included a contract provision for the owner to redesign if there were any flaws in those plans. In retrospect, it probably would have made more sense to have left those plans at 90% and to give the contractor responsibility for completing them. The reason for developing these plans to 100% was to allow the contractor to start construction immediately. In fact, because of the lag time between award of the contract and the finance date, the contractor would have been able to take those plans to 100% prior to issuance of a full notice to proceed.

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

Request for Proposals, Contract, Technical Provisions

4.3 Did you use prescriptive or performance specifications? How were they developed?

We used both prescriptive and performance specifications. The specifications were developed by ACTA's program manager and required months to prepare.

For example, we specified minimum concrete strengths (a performance specification) and stated a maximum water – cement ratio of 0.4 (a prescriptive specification).

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

The proposal was part of the contract. We did not have any problems, but did require the contractor to provide a clarification regarding the intent of the original proposal with regard to certain statements made in the proposal. Because of the low cost selection process the proposals did not include any commitments to enhance the project quality.

The "Basic Configuration" is defined as

(a) the minimum clearances between the tracks, between the tracks and the Trench walls, and between the tracks and the overhead structures;

(b) the general location of the drill track, the By-pass Track and the Storage Track;

- (c) the number of tracks and the number of cross-overs;
- (d) the railroad signal spacing; and
- (e) the number of lanes for Roadway Improvements.

The contractor was not permitted to make material changes to the Basic Configuration without ACTA's approval, and ACTA would pay the cost of (or receive a credit for) the cost of any material changes in Basic Configuration that were necessary in order for the Project to be feasible.

- 4.5** Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

Proposal documents were delivered into escrow on the Proposal Due Date. Prior to award ACTA representatives reviewed the selected proposer's EPDs to determine whether they were complete. Following award the documents were delivered to ACTA to be held in a locked file cabinet (with the key held by the Contractor).

The EPD's have been helpful re disputes regarding scope, pricing of work. They help to discourage unjustified claims.

For future contracts, we would want to require pricing data for major subcontracts, and conduct a preliminary review as the pricing data is provided, similar to the pre-award review of the contractor's data described above.

- 4.6** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

We would want to consider ways to avoid disputes regarding compliance with third party agreements. The contract documents included agreements with local agencies serving to establish the procedure to be followed by the contractor in design and construction of improvements that would be owned by the local agencies. Provisions in these agreements were interpreted differently by the contractor and the local agencies (such as the meaning of the phrase "in substantial accordance with"). We might want to include a provision regarding the philosophy underlying the contractor's dealings with third parties—requiring the contractor to satisfy the agency's requirements, and limiting the contractor's recourse if it disagreed with the agency.

We would want to include a basic configuration concept for any greenfield project for which alignment changes are possible.

We would want escrowed pricing documents.

5. PROJECT MANAGEMENT

- 5.1** How was the project managed?
- Responsibility for day-to-day operations, managing correspondence, document control, etc. is held by ACTA's program manager. Numerous meetings.*

- 5.2** What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?
- Procurement: weekly meetings to determine contract and procurement terms, attended by staff, consultants, general counsel, outside counsel, railroad representative. Program manager drafted technical provisions, with comments from staff, other consultants and attorneys. Attorneys drafted procurement document and contract terms, with comments from staff and consultants.*

Design: lots of meetings, review of design submittals.

Construction: lots of meetings, construction oversight

Change orders require Board approval. A change order strategy team met regularly over the course of each project, including ACTA staff, program management staff, claims consultant and outside lawyers, to ensure consistency in the decision-making process and forestall potential problems.

- 5.3** Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

3 – 4 submittals, reviewed by ACTA, comments reconciled

Joint review team meeting

Because schedule was paramount, contractor was allowed to proceed with construction without requiring all i's to be dotted and t's crossed. However, this early construction is at the contractor's risk—if the construction is inconsistent with the final design requirements the contractor is obligated to correct the construction work. (If the cost to correct is prohibitive an alternate remedy would apply.) As of January 2002, final design has been approved only for 2 miles of trench.

Under California law, in order to preserve sovereign immunity for design defects, the design must have been approved by a public employee with discretion (or by the governing board of the agency).

- 5.4** Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

The DB contractor was responsible for QC and QA. ACTA required proposed staffing levels to be included in the proposal. Those staffing levels were the subject of discussions during pre-award negotiations.

ACTA reserved the right to conduct owner assurance testing and QA oversight, and in fact placed several "field engineers" on site to oversee the contractor's QA/QC efforts. Lack of contractor inspection, failure to issue non-conformances, and inappropriate approval of "use as is" were common, but manageable issues.

In general, we believe the contractor's personnel did a good job on testing, but there was a lapse in documenting. We also have some concerns regarding an apparent reluctance by the contractor to provide direction to subcontractors relating to problems with quality control and assurance.

Lessons learned: We required the contractor to use an independent firm for quality assurance. The firm proposed was relatively small. We now believe we would be better off with a large firm having responsibility, and in fact would prefer the primary designer to play that role. We would also like to have the Engineer of Record provide a certificate at the end of the job regarding conformity of construction to the final design.

In general, we believe it is not necessary for the owner to provide inspection, but that owner oversight is unavoidable. Transfer of inspection to Owner may result in re-design by the Owner's inspectors and can also lead to claims.

- 5.5** What conditions were required to be met before the start of construction?

6.2.2.1 The Second Notice to Proceed shall have been delivered.

6.2.2.2 ACTA shall have approved the CPM/Payment Schedule, the Quality Management Plans and Contractor's Safety Program.

6.2.2.3 Except as otherwise provided in TP 3.20.4 and 5.1.2 regarding Early Start of Construction, ACTA, the Railroads and Local Agencies (where applicable) shall have approved all applicable Project Design Documents and Construction Documents relating to such portion of the Project.

6.2.2.4 All Governmental Approvals necessary for construction of the applicable portion of the Project shall have been obtained and all conditions of such Governmental Approvals which are a prerequisite to commencement of such construction shall have been performed.

6.2.2.5 All insurance policies and bonds required to be delivered to ACTA hereunder prior to commencement of construction shall have been received and approved by ACTA.

6.2.2.6 All necessary rights of access for such portion of the Project shall have been obtained.

6.2.2.7 Contractor shall have performed all survey work and delivered all notices required by the Technical Provisions to be delivered prior to commencement of construction on such portion of the Project.

- 5.6** Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

We established a special procedure for this contract since it represented such a large component of our program. A Disputes Review Board was established with binding authority for disputes below \$1M and with advisory authority for larger disputes. The DRB is required to resolve disputes strictly in accordance with the contract

documents, and the chairman of the DRB is a retired judge. Disputes over \$1M not resolved at the DRB level go to a rent-a-judge. The contractor agreed to be joined in dispute resolution proceedings with third parties (such as local agencies).

- 5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

We would add a requirement for designer certification of construction as a condition to substantial completion.

6. PAYMENT

- 6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?
lump sum of \$697,641,951 plus an amount not to exceed \$14,550,000 for Hazardous Waste Remediation Work (unit priced). No contingency pool.

- 6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?
Progress payments tied to CPM/Payment schedule. Some change orders paid on a time and materials basis, others paid based on a negotiated lump sum or unit prices. Hazardous materials remediation paid based on unit prices up to specified quantities, thereafter paid at 90% of time and materials.

- 6.3 When was mobilization paid and how were mobilization amounts determined?
Initial mobilization of \$3,500,000 upon issuance of first notice to proceed. (This was a negotiated amount.) Second payment of \$3,750,000 plus the amount of the premiums paid by Contractor for the Payment and Performance Bond, payable after issuance of the Second Notice to Proceed. The third mobilization payment of in the amount of \$29,000,000 payable after the start of construction of the Trench or any bridge structures.

- 6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

Only for certain types of materials.

12.3.3 Unincorporated Materials

ACTA will not pay for any material not yet incorporated in the Work other than precast concrete (including ties), rail, special trackwork, railroad signal equipment, steel beams and plate materials that will be permanently incorporated in the Work (excluding concrete reinforcing steel), traffic signals and controllers, light poles, luminaires, and pipe materials for pipes greater than 15" in diameter. Payment for such items will be made only if all of the following conditions have been met:

- 12.3.3.1 *[requirement to delivery to site or hold in bonded storage]*
12.3.3.2 *[requirement to provide bills of sale and mark materials as ACTA property]*
12.3.3.3 *Material included in a invoice but which is subsequently lost, damaged or unsatisfactory shall be deducted from succeeding invoices.*
12.3.3.4 *[amount payable limited to cost of materials less retainage]*

- 6.5 Did you limit payment for equipment?
Equipment is considered part of overhead and is not directly reimbursable

- 6.6 Did you withhold retainage? What percentage? At what point was retainage released?
5% retainage until Corridor Substantial Completion. 75% released 30 days after Corridor Substantial Completion. 15% released 30 days after Project Substantial Completion. Statute requires remaining retainage to be released 60 days after project is accepted, subject to withholding for outstanding issues.

- 6.7** Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.
No
- 6.8** Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?
Yes, no problems. Standard practice in California.
- 6.9** Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?
Maximum payment curve based on cash flow schedule provided by contractor in its bid.
- 6.10** Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?
*Mechanics liens not allowed on public property, but contractors have stop notice rights. Agency can withhold payment if stop notices are filed, but contractor can bond around the stop notices.
 Invoices must include DBE information, documents relating to schedule and certification signed by contractor representative.*
- 6.11** What were the conditions to final payment?
Receipt of all deliverables, special tools, site cleanup, certification re liens etc., consent of sureties, completion of punch list items, release and affidavit
- 6.12** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N/A

7. SCHEDULE

- 7.1** Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?
Deadlines were set by the RFP
- 7.2** Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?
No. Due to the nature of the arrangement between the Ports and the railroads, the finance consultants recommended against incentive payments.
- 7.3** Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?
*Updated schedule required with every pay request. It took a while to obtain an acceptable schedule.
 Problem that schedule doesn't reflect how they actually managed the work.*
- 7.4** Who owned the float?
Contract provides for float banking – didn't ever really keep track – might have been useful in a dispute situation.
- 7.5** Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?
*Owner can require a recovery schedule if the Work is lagging any Critical Path for a period which exceeds the greater of (a) ten days in the aggregate or (b) that number of days in the aggregate equal to 2% of the days remaining until any completion deadline.
 At one point the schedule showed that the contractor was 60-90 days behind schedule. We felt their assumptions were unrealistic and that on-time completion*

was not in jeopardy. In fact our analysis was correct and the project is now scheduled to be opened on time.

- 7.6** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N/A

8. RIGHT OF WAY/UTILITIES

- 8.1** What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

*RFP date: ROW in hand for mainline corridor hand (90% of total ROW)
Proposal date: Ditto*

- 8.2** How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

*Hundreds of parcels were acquired for the project
50 impacted the design-build schedule*

Contract required completed subgrade in the North and South Ends to be turned over to the design-build contractor October 15, 2001. In fact the vast majority of the project was turned over early. A few small pieces are not yet complete—the contractor has been able to work around it

ACTA identified certain “advanced acquisition” parcels and committed to provide them by a specified date. For other parcels, the contractor produced binders that were the basis for obtaining authorization to acquire from the Agency’s Board. The binders include legal descriptions, title reports, appraisals, relocation plans, and appraisal maps. The contractor is also required to provide expert witness services for condemnation actions. ACTA committed to provide access to those parcels within a specified time period after authorization to acquire.

- 8.3** Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

The RFP asked for property to be identified; none was identified.

- 8.4** Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

Record search/validation by utility, and limited potholing

ACTA bears time and cost risk for “Main or Trunkline Utilities” not identified with “reasonable accuracy”; Contractor bears all other time and cost risk. “Main or Trunkline Utility” is defined as a Utility that is either an underground water line greater than 10 inches in diameter, an underground sanitary sewer line greater than 18 inches in diameter, an underground gas, oil or jet fuel line that is not a Service Line, or an underground telephone line which connects two or more central telephone offices. “Reasonable accuracy” is determined on the basis of whether (a) the utility was accurately shown by ACTA as being either inside or outside the Corridor ROW Limits, (b) the utility was accurately shown by ACTA as being either inside or outside a public street, (c) the actual size of the utility varies by more than 25 percent from that indicated by ACTA, or (d) the utility was accurately indicated by ACTA as being either abandoned or active.

- 8.5** Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

One of the major concerns raised by the contractors proposing on the project included utility relocation requirements (the project involves 20 utility owners and over 500 relocations) and other third party requirements (a significant portion of the project is outside of the two cities that are members of the Authority, crossing the jurisdictions of several other cities). The Authority addressed the utility and third party concerns by negotiating agreements with utility owners and local agencies, and included comprehensive provisions in the contract documents addressing different situations that were likely to arise. Several of these agreements were finalized post-proposal and were incorporated into the contract by an addendum and supplemental

proposal prior to award. A change order would have been issued to the extent that subsequent agreements resulted in a change in the contractor's work.

- 8.6** What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

"Utility" or "utility" shall mean a public, private, cooperative, municipal and/or government line, facility or system used for the carriage, transmission and/or distribution of cable television, electric power, telephone, telegraph, water, gas, oil, petroleum products, steam chemicals, sewage, storm water, or any similar commodity. However, when used in the context of the removal, relocation and/or protection of facilities to accommodate the Project, the term "Utility" or "utility" specifically excludes (a) storm water facilities providing drainage for the property on which the Project is to be constructed, (b) traffic signals, street lights, and electrical systems serving existing improvements on such property, and (c) facilities owned by any Railroad, whether or not listed on the Utility Crossing Report.

The contractor was obligated to deal with all non-utility facilities without entitlement to change order (except through the differing site conditions provisions as applicable).

- 8.7** Was here anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Contractor did good job of managing the utility work—although it took them somewhat longer to get started than we wanted. Unclear whether the risk allocation provisions were effective in providing motivation, but in fact there were very few utility problems. There were very few late identified utilities. If we were doing the project again, we would probably require the contractor to mobilize utility engineering during NTP1.

Note: Many potential problems were avoided because ACTA intervened in threats to the schedule from third parties—this was based on a determination that ACTA was better suited to address the problem, and that any potential liability associated with intervention was outweighed by the benefits.

9. RISK ALLOCATION

- 9.1** Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

Time extensions were allowed only for defined "Force Majeure" events. This is due to the fact that the project is revenue financed.

"Force Majeure" shall mean any of the following events (provided such events are beyond the control of Contractor and are not due to an act or omission of Contractor, its employees, agents, officers or Subcontractors or any other Persons performing any of the Work for whom Contractor may be contractually or legally responsible) which materially and adversely affects Contractor's obligations hereunder and which event (or the effects of which event) could not have been avoided or prevented by due diligence and use of reasonable efforts by Contractor:

- (a) [major earthquakes];*
- (b) Any epidemic, blockade, rebellion, war, riot or act of sabotage or civil commotion;*
- (c) The discovery at, near or on the Site of any archaeological, paleontological or cultural resources; or any [reportable hazardous spill by a third party];*
- (d) The discovery at, near or on the Site of any species listed as threatened or endangered under the federal or state endangered species act;*
- (e) [suspension etc. of major environmental approvals provided by ACTA];*
- (f) [change in law]*
- (g) [injunctions]*

The term "Force Majeure" shall be limited to the matters listed above and specifically excludes from its definition the following matters which might otherwise be considered force majeure:

[i] fire or other physical destruction or damage, including lightning, explosion, drought, rain, flood, earthquakes not within the parameters set forth in (a) above, hurricane, storm or action of the elements or other acts of God;

[ii] except as provided in (b) above, malicious or other acts intended to cause loss or damage or other similar occurrence;

[iii] strike, labor dispute, work slowdown, work stoppage, secondary boycott, walkout or other similar occurrence;

[iv] [Hazardous Substances on site as of the contract date] [these were addressed through specific provisions and were therefore excluded from Force Majeure];

[v] [failure to obtain, suspension etc. of any permit other than the major environmental permits];

[vi] any change in a Governmental Rule (such as increases in tax rates) which causes an increase in amounts payable by Contractor for deliverables but which does not change the obligations to be performed by Contractor hereunder, and any change in, or adoption of any new Local Agency Standards, provided that after ACTA's approval of the relevant Intermediate Design Submittal, Contractor is not responsible for implementing any changes in or new Local Agency Standards which would require a revision of said submittal, except pursuant to an ACTA-Directed Change;

[vii] [lawsuits relating to approvals that are the contractor's responsibility]; and

[viii] all other matters not caused by ACTA or beyond the control of ACTA and not listed in (a) through (g) above.

- 9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

A price increase was allowed for changes in the Work resulting from defined Force Majeure events. No price increase was allowed for increases in the Contractor's costs absent a change in scope. This was intended to parallel traditional contracts, for which agencies would implement design changes triggered by a force majeure event through a change order, but would not be required to pay for additional costs resulting from other types of force majeure events. For insured events the contractor is entitled to insurance proceeds but not a change order.

- 9.3 Did any force majeure events occur during the course of the project? If so, what happened?

No significant events occurred.

- 9.4 How were differing site conditions addressed?

The contractor was required to bear the first \$10 million of differing site conditions; ACTA bore the next \$10 million; thereafter the risk was shared 50-50.

- 9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

The contract provides for hazardous materials remediation work to be performed by the design-build contractor based on unit prices, with work not covered by unit pricing to be performed on a modified time and materials basis (the contractor is entitled to reimbursement of 90% of its costs, without mark-up). Costs of disposal of railroad ties were not eligible for extra payment.

- 9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

Differing site conditions were minimal.

We encountered asbestos in minable quantities, as well as a chromium plume, hydrocarbon plume, contaminated soil and contaminated water. The remediation work was performed properly. However, in one case the cost incentives included in the contract did not produce the best result for the project.

- 9.7 What permits/approvals were obtained by the agency before the proposal due date?

Major environmental permits (EIS/EIR)

ACTA also obtained PUC permits for bypass track.

- 9.8 What permits/approvals were the contractor's responsibility to obtain?
All other permits were the contractor's responsibility. ACTA intervened in the application process for PUC permits and for permits from the Regional Water Quality Control Board.
- 9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?
Contractor was responsible for complying with environmental requirements and documenting compliance. There were some minor problems.
- 9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Risk evaluation process was useful and eliminated lots of disputes. Worth spending time on intelligent risk transfer--identify risks and give the contractor motivation to manage the risks efficiently.
We would change the percentage paid for hazardous materials remediation to give the contractor greater incentives to mitigate costs and to use means and methods that are in the best interests of the project. In one case the contractor apparently decided that it was cost-effective to use a construction methodology that required significant remediation efforts, 90% of which were an owner expense. We would probably either go 80-20 or 75-25.
For future projects for differing site conditions we would probably include contractor liability for a specified amount and share 50-50 after that.
We would also include more specific provisions regarding the contractor's obligations—in a number of areas the owner expected the contractor to do more than they thought they had to do.

10. CHANGE ORDERS

- 10.1 Describe the process followed for changes directed by the owner.
Change notice, negotiation, issuance of change order.
- 10.2 Describe the process followed for contractor claims for additional compensation/time extensions.
Contractor required to submit RFC notice followed by a request for change order. If contractor was unable to provide a complete change order, it was obligated to submit an incomplete change order and update it monthly. We agreed to an alternative process to reduce administrative costs.
- 10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?
Construction labor: Actual burdened wages plus a 31% labor surcharge
Non-construction labor: Actual wages plus a 140% labor surcharge
Mark-ups of 15% for construction labor costs, 10% for non-construction labor costs, 10% for material costs, 10% for equipment use costs, 5% for permit fees, and 10% for other direct costs
5% markup for subcontracted work
- 10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?
Very little opportunity for value engineering.
- 10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Markups included in the contract provided a good incentive for the contractor to negotiate lump sum change orders.
Process requiring notification of claims worked well.

11. WARRANTIES/MAINTENANCE

- 11.1** Did the contract include warranties? Describe the scope/term.
One year general warranty
- 11.2** Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?
No. Upon expiration of the warranty the contractor was relieved from liability for patent defects. Liability for latent defects continued for the full statute of repose (10 years in California).
- 11.3** Was a warranty bond required? If so, how was the amount determined?
Contractor has the right to replace the performance bond with a smaller bond at completion, 10% of original bond amount.
- 11.4** Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.
N/A
- 11.5** What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?
Acceptance occurred in stages—relief from liability for maintenance of track as it was placed in operation; relief from liability for third party improvements when the third party accepted liability for maintenance.
- 11.6** Did the scope include post-completion maintenance? If so, how was payment made for such work?
1 year plant establishment—continuing progress payments for such work.
- 11.7** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N/A

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

- 12.1** What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?
~50%
- 12.2** Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?
DBE policy was revised to conform to California law. The design-build M/W/OBE policy allowed subcontractors to be identified post-award.
- 12.3** How were EEO requirements addressed?
Standard contract provisions
- 12.4** Describe your experience with capabilities and turnover of contractor key personnel.
*No issues for construction personnel.
 Turnover was higher than usual for design personnel. Quality of design work was acceptable overall but spotty. They did a good job on design of the basic structure, drainage design was performed by a subconsultant and was problematic. In general, where the specifications allowed for subjectivity in design, the end product did not meet the owner's expectations.*
- 12.5** Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
We would include additional provisions regarding the obligation to coordinate with third parties.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

Builder's Risk	Commercial General Liability	Excess Liability	Environmental Liability	Worker's Comp/ Employer's Liability	Professional Liability	Railroad Protective
\$110m, sublimits of \$60m for Delayed Opening, \$50m for Earthquake and Flood, and \$1m for transit	\$202m/ \$204m	\$200m	\$25M/\$25	Statutory/\$5m	owner's protective policy	as required by RR operator

13.2 What insurance was provided by the contractor?

Commercial General Liability	Automobile Liability	Worker's Comp/ Employer's Liability	Aircraft	Professional Liability
\$50m (\$1m for subcontractors)	\$50m (\$2m for subcontractors)	Statutory/\$5m (\$1m for subcontractors)	\$50m	\$1m

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

The contractor provided payment and performance bonds in the amount of \$250M. The decision to accept less than 100% was based on a survey showing that \$250M was the maximum amount available in the marketplace, and an analysis determining that \$250M was sufficient.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

Agency provided a CERCLA indemnity

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

Liability capped at \$100M. No limit on consequential damages.

Contractor's liability to ACTA for damages resulting from breach of this Contract shall be limited to the sum of (a) all those costs reasonably incurred by ACTA or any party acting on ACTA's behalf in completing or correcting the Work or having the Work completed or corrected by another Person, and (b) the amount of \$100,000,000 (which amount shall specifically include any Liquidated Damages paid pursuant to this Section 17 as well as any payments made to or for the benefit of the Indemnified Parties pursuant to Section 18).

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Unclear whether an owner controlled insurance program saves money to the owner, also unclear whether it provides appropriate safety incentives to the contractor.

Unclear whether the agency benefited from the decision to obtain an owner's protective policy in lieu of a project E&O policy.

ADOT

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **Arizona Department of Transportation**
Name of individual: Ron Williams
Title of individual: State Construction Engineer
Address: 206 S 17th Avenue, MD 172A
Phone: 602-712-7323
E mail: rwilliams@dot.state.az.us
Date : 01-08-02

1. GENERAL INFORMATION

- 1.1 How is design-build used by your Agency?
Freeway widening, Interchange Reconstruction, 2 lanes to 4 lane divided
- 1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.
Dan Lance, Dep. St Engr. 602-712-7391
Floyd Roerich, PM 480-755-1823
- 1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?
I-10 Interchange Remodel, \$3.5 M; I-17 8 miles widen \$85 Million; St Rte 68 Mountainous Rural to Divided Highway \$45 Million; US 60 Freeway widening and major structure \$185 Million – underway
- 1.4 Why did the Agency initiate its design-build program?
Speed of construction and ability to use private grant money for property access improvement.
- 1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a site for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.
Yes; AGC, ADOT & Consulting Engrs sponsored legislation AZ Revised Statutes 28-7363 – 28-7365
<http://www.state.dot.az.us/roads/constgrp/innovations.htm>
- 1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?
Policy was developed jointly. Contractors limited size of jobs to minimum \$40 Million and 2 per year. (in law). Consultants are concerned about cost of proposal development and size of proposals.
- 1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?
Speed of Construction; time reduced approx. 30%. Cost savings of 5-6%
- 1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?
Clear Right of Way, minimal or clearly defined utility conflict, clear environmental conditions.

- 1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

See 1.5

Contact Dr. Jim Ernzen, Arizona State University 480-965-0389

- 1.10 Do you plan to proceed with additional design-build projects? If not, why?
Yes

2. PROJECT BACKGROUND

- 2.1 Identify your project(s) and design-build team member(s) for each project.

I-10 - Cortaro Rd – Tucson, Bruce Purrier PM

I-17 - Phx, Terry Bourland, John Akin

SR 68 - Kingman – Bahram Dariush, Jenifer Livingston

US 60 - Phx, Floyd Roerich, John Akin

- 2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

I-10-Tucson - \$2,760,500 – 3,714,750 – wet subgrade changed conditions.

I-17-Phx-\$79,729,000 - \$86,365,361 owner changes in scope and value engineering.

SR 68 Kingman - \$42,118,780 Underway expected 4-5% Overrun for changes in scope

US 60 Phoenix - \$184,292,800 Underway

- 2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?
Quick Construction, Budget, Minimum traffic disruption

- 2.6 Did design-build help the Agency meet its goals? How?
Yes

- 2.7 Describe the process used to identify risks and minimize the impact of risks.
Careful preparation of Bid Package

- 2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?
Yes. Saved I-10 4 months, I-17 saved 1 year SR 68 saved 4 months.
US 60 estimated completion – 11 months early savings from State estimated const time

- 2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.
It appears we are experiencing 5-6% savings
Year to date average overrun Design-Bid-Build 11% in 2000
On two Design Build Jobs 6% overrun

- 2.10 How was the project funded?
Federal and State Funds
Tucson I-10 had \$300,000 private money

- 2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.
Yes on US 60, we had \$250 million in 5 year budget but 25 months const time required us to get 3 year short term GANS (Bonds) to pay contractor

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.
No

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.
*In Kingman (SR68) Bureau of Land Mgmt was a team member through Bid preparation and Const. On other jobs local cities were involved in specification preparation
 FHWA involved in all jobs from beginning. Done under SEP 14 process.*

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?
*Two step process, prequalified engrs and contrs per current procedure, shortlist 3-5, no preapproval; (used value engr with successful proposer) (Proposal has points for innovative ideas). No BAFO, No Negotiation, Used a + b (time + cost) pricing.
 Divided Price/Technical Proposal Score.*

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.
No Industry Review

3.3 How many firms were shortlisted? How many proposals were received?
Shortlisted 3 on 3 jobs, 4 on another, 6 & 7 proposals on RFP

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).
BV= cost + time / tech proposal score

3.5 If negotiations were part of the process, were they useful? Please explain.
Not Applicable

3.6 If the process included final proposals or BAFOs, please explain why, and describe final differences between the proposals/BAFO and the initial proposals.
No BAFO

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.
*No deviations in proposal stage
 Design exceptions which were allowable were stated*

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?
*Yes 0.2 of Bid Amount for non successful proposers. Proposer could waive stipend and keep proposal.
 Owner can use ideas when stipend paid.*

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?
*One month short list
 6 weeks on tech Proposal
 7-9 reviewers. Law requires a contractor and consultant on panel. PM always included. FHWA and City involved when appropriate.*

- 3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)
Numerical weighting to technical proposed elements schedule a factor if a + b was used
BV = Price + time / Tech score
- 3.11 Were there any protests? If so, please describe the circumstances and results.
No protests
- 3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?
Yes – Some final ROP requirements issued by addendum prior to technical proposal preparation by bidders.
- 3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Would like to see law changed to allow confidential negotiation on scope acceptance (no price details) before tech proposals received. This should encourage innovation.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

- 4.1 What level of design was completed prior to issuance of the procurement package?
10-20%
- 4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions)
All of above. Start with Design Concept Report and EIS, Modified See 100 General Specifications to fit Design Build Special conditions and standard technical specifications.
- 4.3 Did you use prescriptive or performance specifications? How were they developed?
Combination, performance wherever possible
- 4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?
Yes. Lowest priority document, Yes contractor wanted to do everything as proposed. It was necessary to sort through fine details though "partnering".
- 4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?
Escrowed Documents. No need to review to date.
- 4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Same as 3.13

5. PROJECT MANAGEMENT

- 5.1 How was the project managed?
ADOT PM, D/B PM
ADOT used General Consultant to prepare bid documents
- 5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?
Legal – Atty General, Design-General Consultant – Construction ADOT PM & Res Engr.
- 5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?
On Project Site Review by team and Conslt. Occasionally home office involved in quick review. Oversight as needed. D/B certifies final plans. Early construction was goal
- 5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?
One for plans; Different for const.
QC – construction – D/B Firm
QA – D/B Firm & ADOT – Specified checkpoints & Sampling frequency
Ind Assurance - Owner
- 5.5 What conditions were required to be met before the start of construction?
Approved segmental plans
- 5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.
Partnering escalation
To date only two issues on all projects have been elevated to District Engineer
- 5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Continue to clarify roles and responsibility under quality plan.

6. PAYMENT

- 6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?
Lump sum. General Items i.e. Design BridgeA
Construct Bridge A
No Allowances. 5% Standard Contingency
- 6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?
Monthly Lump Sum complete concurred on by Owner & D/B PM
Used construction CPM.
- 6.3 When was mobilization paid and how were mobilization amounts determined?
4 mobilization payments totaling 5% of contract.
1) Preconstruction, 2) commence work, 3) 5% complete, 4) 10% complete
- 6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?
Yes. Separate stockpile or invoice.

6.5 Did you limit payment for equipment?

Not applicable

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

Yes. 5% reduced to 2% @ 95% complete to 1% at work completion.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

a + b bidding without incentive for early completion. Liquidated damages if date not met. Several work objective incentives used.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

We allow use of securities

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

No. Paid per actual earnings

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

No liens honored by ADOT

6.11 What were the conditions to final payment?

Completion of all documentation submittals i.e. payrolls, material certifications.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Always consider incentives to promote speed and motorist convenience.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

We gave maximums contract days allowable

Contractor shortened through a + b bidding

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

We used Liquidated damages based on Road user costs – All high volume roadways

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

7.4 Who owned the float?

Not considered

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

Not Applicable – Project always ahead

- 7.6** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
No. A + B bidding where contractor drives schedule

8. RIGHT OF WAY/UTILITIES

- 8.1** What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?
RFP date: State law requires state to have
Proposal date: Right of Way in possession prior to advertising.
- 8.2** How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?
Contractor's are allowed to make arrangements for construction easements they may need
- 8.3** Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?
No See 8.2
- 8.4** Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?
ADOT attempted to identify all possible utility conflicts by showing locations
- 8.5** Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?
No – unable to do so as new design unknown.
- 8.6** What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?
Utilities and street lights and other systems of other agencies as well as gas, electric, water, TV, fiber optics.
- 8.7** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Continue to require close cooperation between agency and D/B firm. Continue to look at all alternatives of moving i.e. utility move, contractor move, utility hire contr. – utility participate in relocation design.

9. RISK ALLOCATION

- 9.1** Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.
Has not occurred. We would allow time.
- 9.2** Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?
Not Applicable. See 9.1
- 9.3** Did any force majeure events occur during the course of the project? If so, what happened?
No
- 9.4** How were differing site conditions addressed?
Through supplemental agreements

- 9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?
None encountered – would be handled through supplemental agreement if not identified in scope of work.
- 9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?
In Tucson – wet subgrade – removed by Force Account (labor, equip. & matls)
- 9.7 What permits/approvals were obtained by the agency before the proposal due date?
All right of way - concurrence of fast track methods by railroads
All environmental documents
- 9.8 What permits/approvals were the contractor's responsibility to obtain?
NPDES, Local Permits
- 9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?
Contractor had to comply with remedial actions in R.O.P.
- 9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
On projects through other major owners (BLM., USFS) have their staff member assigned to project.

10. CHANGE ORDERS

- 10.1 Describe the process followed for changes directed by the owner.
Define scope – Have contractor price – negotiate until agreement reached.
- 10.2 Describe the process followed for contractor claims for additional compensation/time extensions.
Standard Partnering Escalation
ADOT PM - D/B PM
Dist Engr – D/B Principal (only 2 of these to date)
State Engr – D/B President
- 10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?
No work done Force Account
Standard Mark UPS used if needed
Not to exceed 20% for contr and subs combined.
- 10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?
Yes – 50% savings
Yes – ADOT paid for 2' additional widening, each direction
ROW not eligible.
- 10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

11. WARRANTIES/MAINTENANCE

- 11.1 Did the contract include warranties? Describe the scope/term.
No

- 11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?
NA
- 11.3 Was a warranty bond required? If so, how was the amount determined?
NA
- 11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.
NA
- 11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?
Maintain during construction, ADOT assume maintenance on acceptance of completed sections.
- 11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?
No Maint. Agreement
- 11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

- 12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?
10% Required
- 12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?
*Yes – Include Design & Construction toward goal
Contr required to provide items intended to be subbed to DBE's as actual price not available.*
- 12.3 How were EEO requirements addressed?
Standard
- 12.4 Describe your experience with capabilities and turnover of contractor key personnel.
On I-17 Job – Personnel remained on US 60 job – Several key proposed members in RFQ were changed in Tech Proposal. However state delayed tech proposal: Replacements had to be equal or better than proposed.
- 12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Not allow change of JV partners, or key design firms.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

- 13.1 What insurance was provided by the Agency?
*One OCIP – Owner controlled Insurance Program
One Standard 3 million errors & omissions and increased liability*
- 13.2 What insurance was provided by the contractor?

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

yes

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

Not A

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

See Specs

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Yes- Not use OCIP. Include Professional liability Insurance to cover errors between designer and constructor to hold owner harmless.

Note:

I will mail a floppy disc of US60 Bid Package (Specifications)

Attached sheet is internet address of our 2001 D/B Guide.

AC/BC

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Atlantic City/Brigantine Connector

Agency: South Jersey Transportation Authority/NJDOT/MGM-Mirage (Tri-Venture)

Name of individual: Richard Fischer

Title of individual: Program Manager

Address: 506 Carnegie Center Drive, Princeton, New Jersey 08540

Phone: (609) 734-7021

E mail: fischerr@pbworld.com

Date : January 4, 2002_

1. GENERAL INFORMATION

- 1.1** How is design-build used by your Agency?
-- *One time special project*
-- *Special design-build package within NJDOT funding rules*
-- *Low bid was sole criteria for selection*
- 1.2** Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.
NJDOT Rich Gramlich (609) 530-2194
- 1.3** Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?
Atlantic/Brigantine Connector
- 1.4** Why did the Agency initiate its design-build program?
Economic Development (MGM) would pay 1/3 of cost of highway improvements if done as soon as possible (providing access to casino)
-- *Funds and project control given to MGM who pushed design-build*
- 1.5** Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.
No knowledge re authority for public-private partnership – no legislation required for low bid design-build
- 1.6** Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?
None.
- 1.7** Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?
Goals have been met, within schedule and dollars
- 1.8** What are the criteria used to decide whether design-build is appropriate for a particular project?
See 1.4
"Time of essence."
- 1.9** If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?
Will be forwarded. N/A

1.10 Do you plan to proceed with additional design-build projects? If not, why?
N/A

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.
Yonkers/Granite, design by URS

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.
\$190 M original
\$200 M final due to enhancements by owner (plus share of contingency)

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?
Shortest time as possible to completion
November 1997 through Summer 2001 open

2.6 Did design-build help the Agency meet its goals? How?
Yes – opened on schedule

2.7 Describe the process used to identify risks and minimize the impact of risks.
Contractor told all risks are yours. Agency set contingency costs for unknowns (\$28 M) such as utilities, geotech, contaminated materials, force majeure. Contractor gets 85% of remainder of contingency

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?
Yes – aggressive schedule was met

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.
Lower price - \$30 M less than engineers estimated

2.10 How was the project funded?
One-third by NJDOT, one-third by South Jersey Transportation Authority, one-third by MGM affiliate

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.
-- Low bid selection required because of NJDOT funding and ownership
-- Prequalification allowed by NJDOT
-- Need to remain within budget drove contract terms

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.
Dual NTP to allow ROW and environmental permits to be obtained. \$15M budget for utility relocation work following NTP1

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

1. *MGM Mirage Casino (entered into design-build contract)*
2. *South Jersey Transportation Authority (spur to tollroad) (actively involved in establishing terms of design-build contract)*
3. *NJDOT (same as SJTA)*
4. *Atlantic City Mayor in favor*
5. *City Council opposed*

3. PROCUREMENT PROCESS

- 3.1** Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?
-- Prequalifications, 4 teams submitted, 3 approved
-- IFB issued April 1997
-- Bids due July 1997
-- No BAFO
-- No discussion
- 3.2** Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.
None – pre-bid meeting with all proposers, opportunity for written questions
- 3.3** How many firms were shortlisted? How many proposals were received?
4 and 3
- 3.4** Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).
Low bid
- 3.5** If negotiations were part of the process, were they useful? Please explain.
N/A
- 3.6** If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.
N/A
- 3.7** Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.
No, although deviations could be proposed through a VE process after receipt of bids
- 3.8** Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?
None.
- 3.9** Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?
N/A
- 3.10** Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)
Low bid only
- 3.11** Were there any protests? If so, please describe the circumstances and results.
Protest to shortlist – went to court and not sustained
- 3.12** Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?
No federal funds, NJ DEP environmental process Coastal Area Facility Review Act (CAFRA) permit issued as if project by private entity

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

- *Process was appropriate for this project*
- *Other design-build should have more detail on aesthetics*

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?
20%

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

Book I Invitation for Bids, Instructions to Bidders

Book II Contract, Scope of Work, General Provisions

Book III Special Provisions, Roadway Design Criteria, Bridges and Materials, Design Criteria

Concept Design Documents

Reference Documents

4.3 Did you use prescriptive or performance specifications? How were they developed?

Mix of specifications

Perf. specifications: tunnel operations (ventilation, lighting, surveillance), bridge concrete

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

Material change in Basic Configuration (defined as mainline horizontal and vertical alignments, general location of interchanges and type of interchanges) could be implemented only through a VECP

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

Documents escrowed for claim purposes. Contractor selected escrow holder.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N/A

5. PROJECT MANAGEMENT

5.1 How was the project managed?

Consultant (PB) on behalf of Tri-Venture for all except ROW

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

Some oversight by NJDOT, little by others. NJDOT's involvement concerned compliance with standards

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

One DOT staff assigned to project for on-board review, design exceptions specifically reviewed and approved

- 5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

Originally contractor responsible – change order initiated by owners removed QA/QC requirements from the contractor's scope, and the third party consultant became a subconsultant to the program manager.

- 5.5 What conditions were required to be met before the start of construction?

Issuance of NTP2, approval of schedule, quality management program, safety program, approval of design by Contractor's Quality Assurance Manager, permits obtained, insurance and bonds provided ROW in hand

- 5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

*- No special process – engineer/owner made final decision
- No major disputes on project*

- 5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N/A

6. PAYMENT

- 6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

Fixed price

Progress payments off cost loaded schedule

\$28M contingency pool

- 6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

See 6.1

- 6.3 When was mobilization paid and how were mobilization amounts determined?

Mobilization identified in bid - \$500,000 payable at NTP1, rest at NTP2.

- 6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

Yes – proof of payment and location for inspection

Not much used

- 6.5 Did you limit payment for equipment?

No payment allowed for direct costs of equipment

- 6.6 Did you withhold retainage? What percentage? At what point was retainage released?

Yes, initially 10%, stopped withholding at 5%

Release no earlier than 30 days after final acceptance

- 6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

Contingency incentives -- Contractor entitled to 85% of unused amounts

Liquidated damages \$64,000/day plus delay in completion reduces Contractor's share of amounts remaining in contingency pool (by 5% for each week of delay).

13 days late. Liquidated damages were assessed for the delay, but the owner elected not to assess the reduction in the remainder of the contingency fund.

- 6.8** Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?
Yes, bonds in lieu of retainage
No issues
- 6.9** Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?
Payments by cost loaded schedule
Schedule verified monthly
- 6.10** Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?
Evidence of lien/stop notice releases required to be provided prior to final payment
- 6.11** What were the conditions to final payment?
Acceptance by owners
- 6.12** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N/A
- 7. SCHEDULE**
- 7.1** Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?
In contract – not evaluated
- 7.2** Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?
No incentive, liquidated damage based on factors including loss of toll revenues
- 7.3** Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?
Once a month with invoice
Recovery schedule if behind
- 7.4** Who owned the float?
Depended on issues
Mostly owners
- 7.5** Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?
Yes – greater of 10 days or 2% of remaining time
- 7.6** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
No
- 8. RIGHT OF WAY/UTILITIES**
- 8.1** What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?
RFP date: 0%
Proposal date: 0% - one year delay for design during which ROW obtained

- 8.2** How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?
50 parcels ±
No contractor role
- 8.3** Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?
N/A
- 8.4** Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?
-- Utilities located prior to award by agency
-- Contingency fund for major facilities not accurately identified
- 8.5** Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?
Individual agreements with utilities to relocate
Utilities in New Jersey get reimbursed for relocation
- 8.6** What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"
Definition specifically excluded storm water lines, traffic signals, street lights and electrical systems for roadways
- 8.7** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
No
- 9. RISK ALLOCATION**
- 9.1** Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.
Time allowed
Money out of contingency pool
- 9.2** Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?
See 9.1
- 9.3** Did any force majeure events occur during the course of the project? If so, what happened?
No
- 9.4** How were differing site conditions addressed?
Contingency fund
- 9.5** How were contaminated materials/contaminated groundwater/hazardous substances addressed?
Contingency fund
- 9.6** Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?
\$6 M for contaminated materials
- 9.7** What permits/approvals were obtained by the agency before the proposal due date?
CAFRA permit and USCOE permit (prior to NTP2)

- 9.8 What permits/approvals were the contractor's responsibility to obtain?
Construction permits by contractor, dewatering, street closure, etc.
- 9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?
Yes – including wetlands replacement
Minimal noncompliance problems
- 9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N/A
- 10. CHANGE ORDERS**
- 10.1 Describe the process followed for changes directed by the owner.
Standard process
- 10.2 Describe the process followed for contractor claims for additional compensation/time extensions.
Standard process
- 10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?
Yes
140% surcharge on non-construction labor
10% markup on labor, material, equipment and other direct costs
5% markup on permit fees
5% markup on subcontract work
- 10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?
Yes – none submitted
- 10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N/A
- 11. WARRANTIES/MAINTENANCE**
- 11.1 Did the contract include warranties? Describe the scope/term.
Yes. Tunnel appurtenances 5 years
Roadway 2 years
- 11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?
No
- 11.3 Was a warranty bond required? If so, how was the amount determined?
Yes – Unknown
- 11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.
No
- 11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?
Full responsibility until acceptance

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

No

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

Information not available

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

Goals 10% MBE, 5% WBE – Standard NJDOT

Achieved 5% ± 3%±

12.3 How were EEO requirements addressed?

The contract by reference in New Jersey varies by county

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

No turn-over

Yonkers a good contractor

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N/A

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

0%

13.2 What insurance was provided by the contractor?

\$50M CGL

\$25M auto

\$15M E&O

\$10M environmental impairment

Builders risk

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

Yes.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

No indemnity by developer

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

\$30M cap (excluding costs of corrective work)

- 13.6** Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N/A

CDOT

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **Colorado Department of Transportation (CDOT)**

Name of individual: Larry Warner

Title of individual: T-REX Project Director

Address: 7200 South Alton Way, Suite 400, Centennial, CO 80112

Phone: 303/357-8570

E mail: warnerle@trexproject.com

Date : January 11, 2002

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

CDOT contracted out a few smaller design-build projects (less than \$50 million) on Interstate rehabilitation projects using the low bid selection process prior to legislation being passed in 1999. House Bill 99-1324 allowed CDOT to use a best value selection process, which was utilized on the T-REX project. Other than T-REX, there are currently no other design-build projects being developed.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

John Unbewust, CDOT Chief Engineer, Phone Number 303/757-9204

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

See response to 1.1. Feel free to contact John Unbewust to provide more of an agency perspective.

1.4 Why did the Agency initiate its design-build program?

CDOT believed there were other valid contract procurement processes other than the traditional design-bid-construct. CDOT has used A+B bidding, low bid design-build, etc. and with the T-REX project, wanted to explore a best value selection process. Design-build can provide a faster, more efficient and more cost-effective contractor selection and procurement process to design and construct transportation projects.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

Yes, House Bill 99-1324 (see attached) was signed in to law in 1999. Also, as a result of the legislation, CDOT developed Rules for the requirements for utilizing design-build as a procurement method (see attached).

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

CDOT did receive concerns about design-build from both contractors and consultants during the legislative process and also the rule-making process. Concerns that all projects would utilize design-build, smaller contractor involvement, larger out-of-state contractors taking over, contractor/consultant relationships, DBE involvement, etc. were some of the concerns. Most of the concerns were addressed through the formal rule-making process, which established task groups including participation from external stakeholders (contractors and consultants). Allowing those stakeholders to participate in the process and to assist in developing the Rules helped address the majority of the concerns.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

The smaller Interstate rehabilitation design-build projects have been successfully completed. The T-REX project successfully went through the best value procurement process and has awarded their contract on June 1, 2001. The procurement process was deemed successful and implementation is now underway.

- 1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

Informal guidelines were being established, but have not yet been formally adopted. Rules state that design-build can be utilized "where the Chief Engineer determines such use is appropriate and in the best interests of the public"

- 1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

See attached CD-ROM, which includes our Instructions to Proposers (ITP), Book 1 Contract and Exhibits and Book 2 Technical Criteria. I'm not aware of any CDOT document that reports on the results of our design-build projects. Please see attached Draft Initial Report, Special Experimental Project 14 (SEP 14), which provides an overview of the T-REX project, including the evaluation process.

- 1.10 Do you plan to proceed with additional design-build projects? If not, why?
I anticipate that CDOT will continue to utilize design-build in the future.

2. PROJECT BACKGROUND

- 2.1 Identify your project(s) and design-build team member(s) for each project.
Please refer to the attached SEP 14 Draft Report () .*

- 2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

(*)

- 2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

(*)

- 2.6 Did design-build help the Agency meet its goals? How?

(*)

- 2.7 Describe the process used to identify risks and minimize the impact of risks.

(*)

- 2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?

Under the traditional design-bid-construct process, the T-REX project could have taken between 15 to 20 years to complete. By having the financial capability to bond and use the design-build procurement process, our established goal for project completion was June 30, 2008. The Southeast Corridor Constructors (SECC), the successful proposer, has committed to complete the project in the fall of 2006, almost two years ahead of our project completion goal.

- 2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

Lower total project costs in the areas of inflation, administrative costs, user costs, etc.

- 2.10 How was the project funded?

(*)

- 2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.

The Joint Finance Plan and Request for Proposal (RFP) for the T-REX project included a maximum payment schedule (or annual cap) that the design-build contractor can invoice in a given calendar year. Please refer to Book 1, Section 11.3.2 and Exhibit K.

- 2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

No.

- 2.13** Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

Our established number one goal was to “minimize inconvenience to the public”. As a result, the RFP was completed with that goal being our highest priority.

3. PROCUREMENT PROCESS

- 3.1** Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

(*)

- 3.2** Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

(*)

- 3.3** How many firms were shortlisted? How many proposals were received?

(*)

- 3.4** Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

(*)

- 3.5** If negotiations were part of the process, were they useful? Please explain.

(*)

- 3.6** If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

(*)

- 3.7** Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

(*)

- 3.8** Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

(*)

- 3.9** Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

(*)

- 3.10** Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

(*)

- 3.11** Were there any protests? If so, please describe the circumstances and results.

No.

- 3.12** Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

Yes. Record of Decision (ROD) was approved by the FHWA and FTA on March 16, 2000. All environmental requirements were incorporated in to the RFP.

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

(*) See Section 7.0 Lessons Learned.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

Basically, 30% reference drawings were provided to the proposers, with the exception of the light rail transit (LRT) systems elements and urban design elements, which were provided at approximately an 80% completion level.

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

(*)

4.3 Did you use prescriptive or performance specifications? How were they developed?

(*)

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

The successful proposal was made part of the contract, which did not create any issues. Contract did include reference to our Basic Configuration () and limitations associated with that are found in Book 2.*

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

Yes, Escrow Proposal Documents (EPD) were required to be delivered to a specified bank and were not reviewed during the evaluation process (See Book 1, Section 21).

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Was very pleased with the overall results of our procurement process. We were successful in meeting our schedule and milestones that were established early on. Industry review process was very valuable in getting to know our proposers and also seeking their feedback in to the process.

5. PROJECT MANAGEMENT

5.1 How was the project managed?

(*)

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

A multi-disciplined project team was established which included CDOT, Regional Transportation District (RTD), consultants and outside attorneys for the project. I lead the project team and have both authority and accountability to manage the project and procurement process. () for more details.*

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

(*)

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

(*)

5.5 What conditions were required to be met before the start of construction?

(*) and refer to Book 1.

- 5.6** Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

Yes, we are in the process of establishing our Dispute Resolution Board (DRB), refer to Book 1, Section 19.2.

- 5.7** Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Build on successes and continue to improve the processes. I would not do anything drastically different. Emphasis - need to have good people on your team - we were successful in part to the great people on my team.

6. PAYMENT

- 6.1** Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

() Lump sum bid.*

- 6.2** Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

Refer to Book 1, Section 11 Payment.

- 6.3** When was mobilization paid and how were mobilization amounts determined?

Refer to Book 1, Section 11 Payment.

- 6.4** Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

Refer to Book 1, Section 11 Payment.

- 6.5** Did you limit payment for equipment?

Refer to Book 1, Section 11 Payment.

- 6.6** Did you withhold retainage? What percentage? At what point was retainage released?

Refer to Book 1, Section 11 Payment. SECC did choose to utilize a letter of credit.

- 6.7** Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

() An incentive program exists for our DBE program (see Book 1, Exhibit F). Liquidated Damages are included in the Contract (see Book 1, Section 17 Damages).*

- 6.8** Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

Yes and it was done, no problems currently exist.

- 6.9** Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

Yes, a Maximum Payment Schedule was included in the RFP, which was determined by the Joint Finance Plan for the project.

- 6.10** Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

Refer to Contract.

- 6.11** What were the conditions to final payment?

Refer to Book 1 Section 11 Payment.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Refer to previous responses.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

No, were determined by the proposal. Schedule/Work Plan was a major element that was evaluated during the RFP evaluation process.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

No early completion incentives were included, although liquidated damages are included on milestones that were submitted in the proposal (refer to Contract).

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

Refer to Contract. Baseline schedule is required to be Approved.

7.4 Who owned the float?

Project float.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

Yes – refer to Contract.

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date: Less than 20%.

Proposal date: Approximately 35%.

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

Over 100 parcels still needed to be acquired post-award. The RFP provided a specific date that each parcel that had not been acquired prior to the RFP date would be turned over to the selected design-build contractor. All ROW was to be acquired by the end of 2001. The selected design-build contractor was able to provide input on those ROW parcels that needed to be a higher priority based on their construction schedule. Contractor is responsible for obtaining all temporary easements.

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

Contractor is responsible for obtaining all temporary easements. Proposers did not identify any additional property.

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

()*

- 8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

Yes. See (*) and refer to Contract.

- 8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

(*) and refer to Contract.

- 8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

9. RISK ALLOCATION

- 9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

Refer to Contract.

- 9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

Refer to Contract.

- 9.3 Did any force majeure events occur during the course of the project? If so, what happened?

None to date.

- 9.4 How were differing site conditions addressed?

Refer to Contract.

- 9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

(*) and refer to Contract.

- 9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

In process.

- 9.7 What permits/approvals were obtained by the agency before the proposal due date?

We provided the Army Corps of Engineers 404 Permit, CDOT's Municipal Separate Storm Sewer Permit and Senate Bill 40 Certification. Contractor is responsible for acquiring all other permits and governmental approvals. (*)

- 9.8 What permits/approvals were the contractor's responsibility to obtain?

Not specifically listed in RFP. (*)

- 9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

(*) and refer to Contract.

- 9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

10. CHANGE ORDERS

- 10.1 Describe the process followed for changes directed by the owner.

Refer to Contract.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

Refer to Contract.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

Yes, Time and material markups were established in the Contract.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

Yes, savings on approved Value Engineering Change Proposals (VECP) are shared 50/50. Currently evaluating some VECP, none have been approved yet.

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

() Basically, the contract is required to warranty the work completed on the project for one year following Interim Completion of a Highway Segment, ITS Acceptance, Highway Completion and LRT Acceptance for Revenue Service with exceptions for landscaping and wetlands.*

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

Refer to Contract.

11.3 Was a warranty bond required? If so, how was the amount determined?

Yes, refer to Contract.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

Not to date.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

()*

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

No, except for the maintenance of landscaping and wetlands (see Contract).

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

Project under construction.

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

Refer to Contract.

12.3 How were EEO requirements addressed?

Refer to Contract.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

Contractor is required to submit for approval substitutions of Key Personnel.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

() and refer to Contract. CDOT/RTD provided a Partnered Controlled Insurance Program (PCIP).*

13.2 What insurance was provided by the contractor?

Refer to Contract.

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

Refer to Contract.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

Refer to Contract.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

Refer to Contract.

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

FHWA

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **Federal Highway Administration, Federal Lands Highway Program**

Name of individual: Daniel Alexander

Title of individual: Procurement Analyst/Contracting Officer

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Date : 2/4/02

1. GENERAL INFORMATION

1.1 How is design-build used by your Program Office ~~Agency~~?

In Design-Bid-Build, the scope of work and design criteria is developed then advertised in the Commerce Business Daily for construction bids. These bids are opened and the lowest, responsible, and responsive bid is accepted resulting in an award. The Design-Build process uses a qualification-based selection process coupled with project specific technical and cost/pricing information to decide the best value to the Government.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

Gerald Yakowenko 202 355 1562

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

(See attached FLH Design Build Primer)

1.4 Why did the Agency initiate its design-build program?

Design Build provided the following benefits:

Single point responsibility for design and construction to mitigate conflicts and the shifting of liabilities between contractors and designers,

The ability to fast-track the delivery of a completed project may lower overall costs, and can allow for earlier use of the completed facility.

Reduction in contract growth potential by shifting risk and partial control to contractor

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a citation for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

The Federal Acquisition Reform Act of 1996 enacted under Section 4105 of the National Defense Authorization Act of 1996 PL. 104-106 and Title III of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 251 et seq.) have provided for the effective use of a "two-phased" Design-Build(DB) selection process which is quite different from the Design-Bid-Build methods predominately used within Federal Lands

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

Very little opposition...only learning curve issues.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)?

Yes

What benefits have resulted from use of design-build?

See question 1.4 above

- 1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

See Primer below

- 1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

- 1.10 Do you plan to proceed with additional design-build projects? If not, why?
Yes.

2. PROJECT BACKGROUND

- 2.1 Identify your project(s) and design-build team member(s) for each project.

- 2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

- 2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

- 2.6 Did design-build help the Agency meet its goals? How?

- 2.7 Describe the process used to identify risks and minimize the impact of risks.

- 2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what were the time savings and how was this determination made?

- 2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

- 2.10 How was the project funded?
Highway Trust Fund – Federal Lands Highway Program . . . various funding categories!

- 2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.
No

- 2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

- 2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

3. PROCUREMENT PROCESS

- 3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

See Primer below

- 3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

No.

- 3.3 How many firms were shortlisted? How many proposals were received?

- 3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

- 3.5 If negotiations were part of the process, were they useful? Please explain.

- 3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

- 3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.
- 3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?
- 3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?
- 3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)
- 3.11 Were there any protests? If so, please describe the circumstances and results.
- 3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?
- 3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

- 4.1 What level of design was completed prior to issuance of the procurement package?
- 4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).
- 4.3 Did you use prescriptive or performance specifications? How were they developed?
- 4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?
- 4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?
- 4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

5. PROJECT MANAGEMENT

- 5.1 How was the project managed?
- 5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?
- 5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?
- 5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?
- 5.5 What conditions were required to be met before the start of construction?

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

Both . No contingency pool.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

Progress, milestones and unit prices

6.3 When was mobilization paid and how were mobilization amounts determined?

N/A

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

N/A

6.5 Did you limit payment for equipment?

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

6.11 What were the conditions to final payment?

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

7.4 Who owned the float?

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date? RFP date: Proposal date:

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

9.4 How were differing site conditions addressed?

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

9.7 What permits/approvals were obtained by the agency before the proposal due date?

9.8 What permits/approvals were the contractor's responsibility to obtain?

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

11.3 Was a warranty bond required? If so, how was the amount determined?

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

12.3 How were EEO requirements addressed?

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

13.2 What insurance was provided by the contractor?

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

ACQUISITION PRIMER
Federal Lands Highway Program
DRAFT — DRAFT — DRAFT
Section: HUBZone Empowerment Contracting Program
Date: September 25, 2000

Part Description

1. Overview
2. Definitions
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18. Obtain Final Selection Approval
19. Award of Contract
20. Debriefings
21. Payment of Stipends

1. **Overview** - The Federal Acquisition Reform Act of 1996 enacted under Section 4105 of the National Defense Authorization Act of 1996 PL. 104-106 and Title III of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 251 et seq.) have provided for the effective use of a "two-phased" Design-Build(DB) selection process which is quite different from the Design-Bid-Build methods predominately used within Federal Lands. In Design-Bid-Build, the scope of work and design criteria is developed then advertised in the Commerce Business Daily for construction bids. These bids are opened and the lowest, responsible, and responsive bid is accepted resulting in an award. The Design-Build process uses a qualification-based selection process coupled with project specific technical and cost/pricing information to decide the best value to the Government.

1.1 Reasons to use of a Design-Build delivery system:

- 1.1.1 Single point responsibility for design and construction to mitigate conflicts and the shifting of liabilities between contractors and designers,
- 1.1.2 The ability to fast-track the delivery of a completed project may lower overall costs, and can allow for earlier use of the completed facility.
- 1.1.3 Reduction in contract growth potential by shifting risk and partial control to contractor

1.2 Consideration to ensure a successful Design-Build project:

- 1.2.1 Intense involvement and agreement up-front. Customers, partners, stakeholders, service providers all must come together to develop, understand, and agree on the project requirements, and must have agreement on a decision making process including conflict resolution.
- 1.2.2 Use of performance-based specifications to the greatest practicable extent.

- 1.2.3 Singular leadership over the entire process meaning one lead person is designated to coordinate the overall process to be responsible and accountable for the project.
- 1.2.4 Understanding of all parties, that shifting risk to the contractor requires that partial control also be shifted to the contractor. Thus outcomes are less certain

2. Definitions

- 2.1 Acquisition Team(Acq.Team) - consists of all participants in Government acquisition including representatives of the technical and procurement communities within the Division Offices, Client Agency and Partners, Contracting Officer (CO), Chief of the Contracting Office(COCO), and HFL-1 staff.
- 2.2 Design-Build (DB) - combining design and construction in a single contract with one primary contractor.
- 2.3 Phase One - a process where preliminary (qualification based) information is requested from a contractor in the form of a resume or qualification submission, from which the three to five most highly qualified contractors are identified and subsequently short-listed. This reduces the number of contractors to be considered during phase two.
- 2.4 Phase One Proposal - a summary record of the Design-Build team's history and experience generally following the SF 254/255 format.
- 2.5 Phase Two - a process where technical and cost/price proposals are requested from the 'short listed' firms identified in phase one. They are evaluated and from this evaluation, a selection is made.
- 2.6 Phase Two Proposal - Technical and Price submission
- 2.7 Project Management Team (PM Team) - Division-based team designated responsibility to oversee the entire design build process.
- 2.8 Public Announcement - Advertisement in the Commerce Business Daily and other local, regional, and national forums.
- 2.9 Qualifications-based Selection (QBS) - selection based on qualifications as opposed to low bid selection.
- 2.10 Stipend - A fixed payment offered to the phase two unsuccessful offerors for partial compensation of their proposal preparation costs. Stipends may be appropriate but are not required. See section 12.
- 2.11 Two Phased Design-Build selection procedures - selection method in which responsive, responsible offerors are short-listed during Phase one to submit detailed proposals (technical and cost/price) for Phase two.

3. Design-Build Process:

P A R A	Process Steps	Decision Maker	Primary Process Owner	Secondary Process owner	Time
PHASE ONE - Qualifications-based Selection					
5	Acquisition Planning	COCO	Acq. team	PM Team	
6	Design Build Eval Board (Board)	COCO	CO	PM Team	
7	Synopsis/Solicitation Development	Acq. Team	Board	CO	
8	Public Announcement CBD/ Solicitation	CO	Acq. Team	PM Team	
9	Receipt of Phase One Proposals	CO	Board Chair		
10	Phase One Selection	COCO	CO	Board	
PHASE TWO - Technical and Price/Cost					
11	Issue Request for Proposals	CO	Acq. Team	PM Team	

P A R A	Process Steps	Decision Maker	Primary Process Owner	Secondary Process owner	Time
12	Use of Stipends	CO	Board	PM in cooperation w/ HFL-1 Staff	
13	Conduct a Preproposal Conference (optional)	Board Chairman	Board	PM Team	
14	Receipt of Phase Two Proposals	CO	Board	PM Team	
15	Review of Phase Two (Technical) Proposals	CO	Board & CO	PM Team	
16	Review of Phase Two (Price/Cost) Proposals	CO	Board	Acq. Team	
17	Conduct Negotiations/ Discussions w/ Offerors (Optional)	CO	Board	PM Team	
18	Obtain Final Selection Approval	COCO	Board	Board	
19	Award	CO	Board Chairman	Board	
20	Debrief	CO	Board		
21	Payment of Stipends	CO	Acq. Team		

4. Authority

4.1 Public Laws

4.1.1 PL. 104-106

4.2 U.S.C

4.2.1 41 U.S.C. 251(3)

4.3 Federal Acquisition Regulation

4.3.1 FAR Part 5

4.3.2 FAR Part 15

4.3.3 FAR Part 36

4.3.4 FAR Part 53

4.4 Transportation Acquisition Regulation

4.4.1 TAR Part 36, Part 15

4.5 Transportation Acquisition Manual

4.5.1 TAM Part 1236, Part 1215

5. **Acquisition Planning** is required as the first step in the organizational decision of how to best fulfill requirements. This is the stage at which the decision to use the Design Build process is made.

5.1 Project Initiation - Evaluating project delivery needs , organizational requirements, and customer needs should be considered for the applicability of Design Build.

5.1.1 Criteria for Use of Design-Build: - The Contracting Officer shall make a written determination to use the two-phase selection procedures based on the following criteria.

5.1.1.1 at least 3 qualified offerors are anticipated

5.1.1.2 design work must be performed before an offeror can develop a price or cost proposal for such a contract

5.1.1.3 the offeror will incur a substantial amount of expense in preparing the offer

5.1.1.4 the CO has considered information such as the following:

(A) the extent to which the project requirements have been adequately defined.

- (B) the time constraints for delivery of the requirement
 - (C) the capability and experience of potential contractors.
 - (D) the suitability of the project for use of the two-phase selection procedures.
 - (E) other criteria established by the agency such as:
 - Time requirements of a two-phased selection process and tie required to develop clear comprehensive criteria vs. the time to complete thorough design-bid-build process.
 - Risk associated with varying site conditions
 - Ability to anticipate risks or flexibility to address during design
 - Overall price variances that may be attributable to the design build process
 - Flexibility to incorporate design alternatives
 - (F) the extent to which the customer/partner agencies are willing to fore go control over the process.
- 5.1.2 The CO shall forward his recommendations for the COCO's approval. The use of e-mail for this activity is strongly encouraged.
- 5.2 Scope of Work - Scoping or developing a scope of work statement normally means developing a description of the technical requirements for the work. Since the level of agency inspection should be minimal, and since the benefits of Design-Build contracting are maximized when the DB firm has maximum opportunity for innovation, it is important that the scope of work minimize prescriptive specifications and instead define the performance or performance based requirements for the work.
- 5.2.1 Performance Specification - A performance specification defines, the durability and other required conditions of key construction elements such as slopes, pavement, walls, etc. Because performance is defined over time, performance specifications generally require a warranty clause and warranty bond to be enforceable.
- 5.2.2 Performance Based Specification - Performance Based Specifications set an object or standard to be achieved at the time of acceptance. The standard may be reflected by one or more test results or physical inspections, but the tests and inspection criteria should be reflective of expected performance.
- 5.2.3 In practical terms, however, it is unlikely that all items of a project can be specified adequately in pure performance terms alone. Ultimately many of the quality control criteria specified in the Standard Specifications will also be required to be implemented and documented by the D-B firm. However, the scope of work should not simply make a blanket requirement that "All work shall be performed in accordance with the Standard Specifications.", since this would incorporate volumes of prescriptive means and methods type specifications.
- 5.2.4 This performance-based scope of work statement is to be developed for inclusion in the RFP that defines the project and provides prospective offerors with sufficient information regarding the Government's requirements which may include criteria and preliminary design, budget parameters, and schedule or delivery requirements. These requirements can either be developed by In-house resources or A&E (design criteria consultant).
- 5.3 Estimate Development is separated into two parts (1) budgetary and (2) basis for comparison during phase two evaluations. During the acquisition planning phase, the Government Estimate is used to determine the level of funding needed to cover the proposed 'to be' acquired services. Program personnel are required to evaluate funds availability. This number is used throughout the process, however, as the specific services are better defined, so will the estimate become more definitive and subsequently a basis for comparison during phase two evaluations. (FAR 36.605)
- 5.4 Type of Contract - For Design Build contracting, a Firm-Fixed-Price contract generally will be used unless another contract is deemed appropriate as described in FAR part 16. Also, Indefinite-Delivery/Indefinite-Quantity Contracts provides for an indefinite quantity, within stated limits, of specific services to be furnished during a fixed period, with deliveries to be scheduled by placing orders with the contractor. Task orders are generally Firm-Fixed-Priced.

6. **Design-Build Evaluation Board** The role of Design-Build Evaluation Board(Board) is to (1) analyze the nature and scope of the project work requirements; (2) Develop the evaluation criteria and rating systems to be used for Phase One - Qualifications-based Selection; (3) prepare the public announcement for the project and provide it to the contracting officer for publication; (4) Develop the evaluation criteria and rating system to be used for Phase Two; and (5) Perform Phase One and Phase Two Evaluation.
 - 6.1 The Contracting Officer (CO) nominates Board members who develop the criteria and set their order of importance in which the offerors will be evaluated. The board shall be composed of (1) one member with experience in acquisition; (2) one or more members with technical experience in the fields of engineering or construction (normally someone from the organization responsible for establishing the work requirements); (3) one member with technical knowledge for the functional (user) requirements of the project; and (4) other special members that may include a customer representative and HFL-1 staff participant; (5) the COCO may add additional members as needed. The chairman shall be designated in the board nomination.
 - 6.2 The CO then forwards the Board nominations to the COCO for approval.
- Read FAR Part 36.3 Two-Phase Design-Build Selection Procedures
7. Synopsis/Solicitation Development - The cognizant technical representative shall review the scope of work and mold the technical requirement into a general definition of the work required for publication in the Commerce Business Daily. (FAR 5) Criteria development is accomplished by the Board.(FAR 36.303-1)
 - 7.1 **Phase One** Evaluation Factors - FAR 36.303-1 requires the Contracting Officer to utilize the following criteria or evaluation factors: (1) Technical approach (but not detailed design or technical information), (2) Technical qualifications, such as: (a) Specialized experience and technical competence; (b) Capability to perform; (c) Past performance of the offeror's team (including the architect-engineer and construction members); and (d) other appropriate factors (excluding cost or price related factors, which are not permitted in Phase One.)

At this point the offerors are now being compared with one another against the criteria published in the CBD. Typically, each member of an evaluation team will review and score each proposal. It is highly recommended however, that these scores not be averaged but that the final evaluation board score for each proposal be reached by consensus. Major differences between evaluators must be resolved in developing a consensus
 - 7.2 **Phase Two** - Competitive proposals include technical proposal and cost or price information. In the solicitation or RFP establish (a) the technical submission for the proposal, including design concepts or proposed solution to requirements addressed within the scope of work (or both) and (b) the evaluation factors and sub-factors, including cost or price, that must be considered in the evaluation of proposals. What this means is: The evaluation factors will be used to evaluate the technical proposal. For example evaluation factors might include, (1) Technical Proposal, (2) Schedule (3) Project Management Plan, (4) value engineering, (5) innovative concepts, (6) durability of design - the proposed system performance as exhibited by warranty/maintenance /repair considerations.
 - 7.3 The Board must determine in advance if oral presentations will be required. If the decision is made to include oral presentations, notice shall be given and the process outlined in the Solicitation. The Contracting Officer/COCO shall approve the Board Chair's recommendation for oral presentations.
 - 7.4 A contract can be awarded on the basis of initial proposals without discussion if the solicitation so states in accordance with FAR 15.610(a)(3).
8. **Public Announcement/CBD/Solicitation** - The Commerce Business Daily as discussed in FAR 5.203 is the public notification media by which U.S. Government agencies identify proposed contract action, however, other industry and public sources such as newspapers, trade journals, and associations of announcement are strongly encouraged.
 - 8.1 FAR part 5 instructs 'Contracting officers to publicize contract actions. In order to (a) increase competition; (b) broaden industry participation in meeting Government requirements; and (c) assist small business concerns, HUBZone small business concerns, and small disadvantaged business concerns in obtaining contracts and subcontracts.'

- 8.2 FAR 5.203(c) requires agencies to allow at least 30 days' response time from the date of publication of a proper notice of intent to contract for architect-engineer services. For large complex projects additional time may be desirable.
- 8.3 The Commerce Business Daily (CBD) and other public announcements should contain enough information about the work requirements so that an offeror can prepare an adequate statement of qualifications/**resume**. Announcements should also describe any administrative details such as when the responses are to be submitted and to what address.

Example:

U.S. Department of Commerce

Commerce Business Daily

P.O. Box 5999

Chicago, IL 60680

1. P (or M)!!
2. 0320!!(MONTH & DAY)
3. 93!!(YEAR)
4. 50700!!
5. 20374-5018!!
6. C (or R)!!
7. Contracting Officer, XXXXXXXX Federal Lands Highway Division Office,(Attn...: Code XXXX), (Address)!!
8. C- (or R-) (Design-Build - XXXXXXXXXXXXXXXX(TITLE AND LOCATION))!!
9. DTFHXX- - - !!
10. XXXXXX!!(CLOSING DATE)
11. Contact (Technical Rep), Technical POC/(1102 Contracting Officer) KO, (Phone Number for KO only)!!
12. N/A!!
13. N/A!!
14. N/A!!
15. N/A!!
16. N/A!!
17. In accordance with PL. 104-106 (41 U.S.C.251(3) (Division Office Name) Federal Lands Highway Division Office is conducting a "two phased" Design-Build(DB) selection. We are soliciting written expressions of interest from offerors desiring to participate in Phase One - Qualifications-based Selection - of this "two phased" selection approach. The project is (project title and location)(include a short description...X number of miles of road, bridge, retaining walls etc..) The estimated design and construction cost range is not anticipated to exceed the budgeted amount of (\$000,000,000 - put your figure here) The duration of this project is not expected to exceed(_____ days/months/years). Offerors interested in being considered for this phase one competition must submit resumes generally in a format similar to the SF 254/255 to (Name and Address). These forms may be obtained from the Government Printing Office or online at www.gsa.gov/forms/. Primary factors that will be evaluated by the Contracting Officer's staff during Phase One are: (1) Technical approach(but no detailed design or technical information), (2) Technical qualifications, such as: (a) Specialized experience and technical competence - experience in Design-Build projects; (b) project management capabilities, (c) capability to perform including bond capability and current workload to offeror resources; (d) past performance of the offeror's team (including the architect-engineer and construction members) -which should include references and points of contact's name and phone number on past and current projects); and (e) other appropriate factors (excluding cost or price related factors, which are not permitted in Phase One.) Secondary evaluation factors to be considered are: safety program, company organization, small business participation (including small business concerns, HUBZone small business concerns, and small disadvantaged business concerns) and commitment. No fewer than 3 or greater than 5 of the most highly qualified Design-Build firms/teams will be chosen or "short listed" to participate in Phase Two of this Design-Build Selection Process. In Phase Two, successful offerors will be sent a Request for Proposal which will outline the remainder of the process requirements. Those firms will be required to provide the necessary information to the Contracting Officer within _____ days after receiving the

Request for Proposal. It is envisioned that within the first 1/3 of this period, a site visit/Preproposal conference will be held to provide final additional instructions and information. Upon receipt of the technical and cost proposals, the Contracting Officer's staff will review the technical proposals and evaluate them based on very specific evaluation factors and sub-factors as outlined in the RFP. Once the technical evaluation has been completed, the price/cost proposals will be reviewed and analyzed. If no technical or cost issues are in need of clarifications, the Contracting Officer's staff will conduct a "best value" analysis and submit their recommendations to the Contracting Officer for approval who may award without discussions. Award of a Firm-Fixed- Priced contract is anticipated within the _____ time period. Design-Build Offerors that meet the requirements listed in this announcement are invited to submit _____ copies of their resume (formatted similarly to the Standard Forms (SF) 254 and 255, U.S. Government Architect- Engineer Qualifications) to the office indicated below. [USE AS APPLICABLE] This is a HUBZone small business set-aside. OR This is a small business set-aside. This proposed contract is being solicited on an unrestricted basis. Interested firms are requested to include telefax numbers, the Duns Number, and Taxpayer Identification Number (TIN) on the submission. Experiences submitted should not be more than 5 years old. The offeror's primary person proposed to be the direct contact with (XXXXXXX) Federal Lands Highway Division Office throughout the contract work should be identified as the "Project Manager". Information in the cover letter and any other attachments will not be included in the official selection process. Fax copies will not be accepted. This is not a request for proposal. [ADD THE NEXT SENTENCE IF THE Offeror IS EXPECTED TO EXCEED \$1 MIL. \$10 million EEO compliance is required.] [Because this contract acquisition could result in an award over \$500,000.00, a subcontracting plan will be required by the selected firm if the firm is a large business concern. This does not apply if the prime firm is a small business concern.] Contracting Officer, XXXXXXX Federal Lands Highway Division Office, (Attn.....: Code XXXX), (Local mailing address)*****

9. **Receipt of Phase One Proposals:** Proposals are received and stored in accordance with Division Office procedures until the closing date. Immediately after the closing date, the Board Chair gathers the Phase One proposals for the Board's review.

NOTE: Read FAR Part 15.6 Source Selection

10. Phase One Selection

- 10.1 The Board is convened to discuss the preselection methodology which includes review of the numerical evaluation rating system to be used; ranking schemes; discussion and explanation of the process itself. It is very important that the Board members understand that this evaluation focuses on each offeror's ability to satisfy the criteria listed in the CBD. Comparison with and technical competition among the offerors is not appropriate during this phase.
- 10.2 The Board must review the phase one proposals to determine the offerors ranking based on the published evaluation factors. They must document the numerical ratings of the offerors with a succinct description of the offeror's strengths and weaknesses in enough detail to adequately describe to the COCO the basis for their ranking.
- 10.3 Upon completion, the Board Chair will record and chart each offeror's score. Once all the offerors scores have been charted to find the 'natural break point', a listing of the most highly qualified offerors (which must include at least three but not more than five offerors), shall be identified. These offerors are considered selected to receive a Request for Proposal. The board must immediately document the results in a report called the DB Phase One Selection Report.
- 10.4 The Board Chair submits the DB Phase One Selection Report to the CO for concurrence.
- 10.5 The CO forwards the DB phase one selection report electronically to the COCO for approval.
- 10.6 Once the DB Phase One Selection report is approved and the unsuccessful offerors have been identified, the Board Chair shall promptly notify offerors in writing that they are excluded from further consideration. At this time the offeror must be advised in the letter that if a debriefing is desired, a written request must be submitted to the Board/CO within three days. FAR 15.1003 addresses the specific requirement.

11. Issue Request for Proposals

- 11.1 The request for proposal should contain the following.
 - 11.1.1 A description of the Design-Build process and an explanation of its purpose i.e., to improve the quality and decrease the expense to the offerors competing for the project.

- 11.1.2 An indication that this will be a Best Value Selection and that a contract will be awarded based on a combination of price and quality
 - 11.1.3 A statement that the quality will be determined by use of evaluation factors.
 - 11.1.4 The evaluation factors must be clearly stated and listed in order of importance. It is important to disclose the relative importance between price and technical.
 - 11.1.5 An indication of the tentative dates or blocks of time anticipated for the major steps of the procurement.
 - 11.1.6 Instructions on post-contract submittals, review times and any “fast-track” provisions required.
 - 11.1.7 Indicate that the RFP presents minimum acceptable criteria and that proposals having higher quality features will be scored accordingly.
 - 11.1.8 Indicate a budgeted range or amount.
 - 11.1.9 Clearly describe the offeror’s latitudes and constraints.
 - 11.1.10 Include the government’s preliminary design, scoping reports, any project/agency requirements, design & construction standards, and required performance criteria or performance based specification for parameters not defined by performance criteria.
 - 11.1.11 Describe the use of performance criteria and the basis on which the criteria were developed. Reference applicable standards, codes and FLH criteria. Remember the primary objective of a Design-Build is to allow the construction industry to propose a variety of design and technical solutions for a given project requirement. Any technical specification shall to the maximum extent practicable, be stated in terms of function to be performed, performance required, or essential physical characteristics and only include restrictive provisions or conditions to the extent necessary to satisfy the needs of the agency (See FAR 11.002).
 - 11.1.12 Indicate those items to which an offeror must strictly adhere as specified and those for which the offeror may exercise flexibility in developing the proposal.
 - 11.1.13 Include the following if using a stipend (see section 12) -

”The Government has determined that it is appropriate to award a stipulated fee to each responsible proposer which provides a responsive, but unsuccessful, Phase Two proposal. If no contract award is made, all responsive proposers will receive the stipulated fee. The amount of the fee shall be \$ _____, and shall be provided to each such proposer within 90 days after award of the Contract or decision not to award.

In consideration for its agreement to pay said stipulated fee, the Government reserves the right to use any ideas or information contained in the proposals in connection with any contract awarded for the project, or in connection with a subsequent procurement, without any obligation to pay any additional compensation to the unsuccessful proposers.”
 - 11.1.14 If the decision is made to have oral presentations, notify the offerors in the RFP.
 - 11.1.15 Notify the offerors that award may be made without discussions (FAR 15.610)
 - 11.1.16 Designate a formal method to handle inquiries and clarifications.
- 12 Use of Stipends (Optional):** - The payment of stipends is an acceptable industry practice and should be evaluated for appropriateness on each Design-Build project and approved by the Division Engineer.
- 12.1 Reasons to use of Stipends:
 - 12.1.1 Stipends should be evaluated on each project where the proposers are expected to incur significant costs to prepare a quality proposal.
 - 12.1.2 Payment of a stipend will
 - 12.1.2.1 lessen the financial impact on offerors,
 - 12.1.2.2 result in a higher quality phase two proposal
 - 12.1.2.3 present the opportunity to acquire ideas.
 - 12.2 Determination of Stipend Amount - Generally for project ranging from \$10 - \$50 million and depending of the scope, complexity of the project, location, time constraints, cost, and other factors, it is reasonable to consider a stipend at the 5-10% range of the estimated

design cost and/or 25-50% of the estimated proposal preparation costs. The larger the overall project costs, the lower the percentage applied.

Note: This amount should be based on the time spent on the proposal, and the size and complexity of the project. Also depends on the amount of design done prior to the RFP and that required with the RFP

- 12.3 A stipend will only be paid to responsive, responsible unsuccessful offerors in the 2nd phase. A contract or purchase order will be placed with each of the non-successful offerors who prepared and submitted a responsible final technical and cost proposal.

13. Conduct a Preproposal Conference (optional): A preproposal conference may be conducted, and should occur within the first one-third of the proposal period with all short listed offerors. Allow enough time for offerors to receive and review the RFP, but schedule the meeting early enough to be of use when offerors are developing proposals. A conference should offer an opportunity to explain the Design-Build process and receive questions about any procedural, technical or functional issues.

13.1 Reasons for a preproposal conference:

- 13.1.1 This conference offers the prospective offerors' first opportunity to clarify their vision, and functional and technical requirements of the project with the team.
- 13.1.2 The objective is to insure that all offerors get the same information and avoid the possibility of misinterpretation of the design requirements.

13.2 The Board is encouraged to request that the offerors submit questions to the Contracting Officer in advance of preproposal conference. The exchange of information and responses shall be protected.

13.3 Minutes of the preproposal meeting should become part of the record and be distributed to all RFP holders.

13.4 A project walk through may be offered as a part of the preproposal conference.

14. Receipt of Phase Two Proposals:

14.1 The RFP should indicate the contracting officer as the contractual point of contact and the board chair as the technical point of contact. It is extremely important for the integrity of the procurement that these two officials work very closely together to ensure the integrity of the process during this question/answer period. A formal amendment must be issued to all competing offerors when significant questions arise during the proposal period. This might include areas that need further clarification, an error in the RFP, or clarification of any point on which there could be a serious misunderstanding.

14.2 The technical proposal shall be kept separate from the cost/price proposals until the technical evaluation is completed.

15. Review of Phase Two (Technical) Proposals:

- 15.1 The Board grades the offerors using the previously established evaluation process plan and evaluation rating factors.
- 15.2 The Board must document the numerical ratings of the offerors with a succinct description of the offerors technical proposals in enough detail to adequately describe to the CO and COCO the basis for their score. Upon completion, the Board records the results and develops it's listing which identifies the technical proposals and ratings.
- 15.3 The Board shall document the result of this review and any issue(s) that must be clarified during negotiation/discussions.

16. Review of the Phase Two (Price/Cost) Proposals - Once technical proposals are complete the Contracting Officer and the Board (with the project management team support as needed) shall evaluate the cost/price proposals. Any apparent errors shall be documented for discussions.

17. Conduct Discussions with Offerors - A contract can be awarded on the basis of initial proposals without discussion if the RFP so states in accordance with FAR 15.407(d)(4) and 52.215-1, and there are no unresolved issues.

18. Obtain Final Selection Approval

18.1 Upon receipt of both the technical and price, the evaluation board shall conduct a final evaluation and the full negotiation process shall be documented. The documentation must include the following: (1) the extent of the board's review and evaluation; (2) the listed offerors; (3) the Board's recommendations and (4) considerations on which the

recommendations are based. This is then forwarded to the CO. The CO reviews and make recommendations to the COCO for approval.

18.2 At this point in the process the COCO has two options. (1) Approve the Board's recommendations or (2) make a different selection.

19. **Award** - A contract shall be awarded to the approved Design-Build firm once any required clearances and notifications have been obtained.

20. **Debriefings** - As soon as practicable the Board shall debrief all offers in accordance with FAR 15.1003 once the final selection has been made. The Board shall promptly notify unsuccessful offerors that they are excluded from further consideration. The offerors must be advised that if a preaward or post award debriefing is desired, a written request must be submitted to the Contracting Officer within three days. FAR 15.1003 addresses the specific requirements.

21. **Payment of Stipends** - If stipends are offered, The CO shall process payments within 90 days of award or decision not to award the DB contract.

FDOT

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **FDOT/State Construction Office**

Name of individual: Greg A. Xanders

Title of individual: State Construction Engineer

Address: 605 Suwannee St. Tallahassee, Florida 32399-0450

Phone: 850-414-5203

E mail: greg.xanders@dot.state.fl.us

Date : 01-23-2002

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

Using A-S and low bid

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

David Sumner (overall)(850-414-4198).

Ken Leuderalbert (overall)(850-414-4792).

Greg Xanders (Construction)(850-414-5203).

Kathy Kuestor (Right of Way)(850-414-4561).

Brian Blanchard (Design)(850-414-4377).

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

Being used on all types. No real limitations to size and type, except maybe urban reconstruction projects. Dollar amounts range from \$500 to \$100 Million.

1.4 Why did the Agency initiate its design-build program?

To cut project delivery time. Reduce/eliminate cost overruns/claims. Gain efficiency in processes. Improve professionalism/quality.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a citation for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

Yes. Worked with industry and legislature. See our web page for details of statutes, rules and procedures.

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

Yes. Both. Some were for it and some were not. Over the years more and more have come on board. Realistically, their main concern was change! For contractors, it was moving away from low bid. For consultants, it was having to "bid" or negotiate for their services with a contractor rather than the Department. We did a lot of talking and working thru their concerns and started with a few pilot jobs. Ultimately though, you have to keep pushing thru the opposition on behalf of the customer.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

Yes. Cut time by 1/3. Very few claims. Higher quality products. More enjoyable working relationships.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

Most jobs can benefit. Mainly it is a matter of owner becoming comfortable in defining scope of work and assigning risk.

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

All documents are available on the web. Still working on a more comprehensive report on results to include jobs awarded this past year.

1.10 Do you plan to proceed with additional design-build projects? If not, why?

Yes. Recently authorized Economic Stimulus Package includes about 25 jobs worth \$425 million. Numerous others just getting underway this past year as well. Will have over \$1.3 billion under construction by summertime.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

Too numerous to list here. Will have 40-50 jobs underway by summer 2002. Some project details on our web site includes names of firms (all partners) and phone numbers.

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

Working on a spreadsheet to document this info. Not complete as yet, but can provide what we do have. Very few price changes. One emergency contract (30 million) had a \$2.5 million S.A. due to some unforeseen subsoil issues that a DRB ruled in favor of the contractor.

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

see 1.4

2.6 Did design-build help the Agency meet its goals? How?

see 1.7

2.7 Describe the process used to identify risks and minimize the impact of risks.

Districts use a team of professionals to develop PFR. Part of this process includes the district looking at the individual project and making decisions as to how the Department can minimize risks for us and the contractor and ultimately, spelling out who has what responsibility.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what were the time savings and how was this determination made?

Yes. A 1991 study by University of Florida documented time savings for FDOT's pilot D-B program based on statistical comparisons. On more recent jobs, it is much more informal using expertise and historical info.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

Initial study by University of Florida says it was slightly higher. However this does not take into account road user delays and business impacts due to time overruns. Also, over time, it is only reasonable to expect that FDOT would get better at scoping jobs (clearer outcomes) and that industry would get more comfortable with the risks and resultant prices come down.

2.10 How was the project funded?

Using normal funding mechanisms. Although recently we did receive additional funding from the Florida legislature as a part of an Economic Stimulus Package.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.

No!

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

No!

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

As a whole, our stakeholders are the transportation public in Florida as well as the contracting and consultant community. We have invested a lot of time working with these industry partners to try to address their concerns.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

Short listing – 1 month. Pre-bid meeting. Teams submit technical and price proposals – 1-4 months. Adjusted score selection (price ÷ technical score) – 1 month.

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

Yes. Get their ideas and questions to help clarify criteria.

3.3 How many firms were shortlisted? How many proposals were received?

Usually 3; but, not more than 5. Usually all 3 short listed firms submit proposals.

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

Adjusted score.

3.5 If negotiations were part of the process, were they useful? Please explain.

N/A

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

N/A

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

No! Not without written approval.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

Yes. All losing firms with responsive proposals.

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

Anywhere from 2-4 weeks depending upon complexity. Anywhere from 3-7 depending on complexity and variety of technical experts needed.

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

Points assigned to technical proposal in each category shown in the RFP, i.e. aesthetics, management team, maintainability, etc. Factor in time on some jobs using A + B approach.

3.11 Were there any protests? If so, please describe the circumstances and results.
None to date.

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

No!

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No comment.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?
Minimal 10% . More focused on outcomes/performance criteria.

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

All of the above. See Florida's web page for guidelines and example RFP's.

4.3 Did you use prescriptive or performance specifications? How were they developed?
Both. Require Firms to use AASHTO criteria in most cases but also provide outcomes desired. In other words we do not dictate bridge type but do dictate that AASHTO and Florida Standards be used.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

Yes. No. The criteria package and the proposal are included in the contract.

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

No. Don't know and do not really care! No. N/A

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Hard to say. We have done so many jobs and we continue to learn and clarify our D-B guidelines on our web page.

5. PROJECT MANAGEMENT

5.1 How was the project managed?

With far less oversight than normal. Not reviewing design details. Just looking to see that AASHTO criteria are met in design and that contract is followed in construction.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

Develop RFP/criteria package. Review design for AASHTO compliance. Oversight inspection and testing.

Consultants – some.

In-house Lawyers – review RFP/criteria packages. Outside lawyers – unknown.

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

No such thing as 30-60-90 stages. Review various components when available. No, formal approval – to avoid liability. Just notify if we see problems. If we miss it, they are still responsible!

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

This is part of their technical proposal. The firms are responsible to provide their game plan.

Yes. Design quality – we let them know when we see violations of AASHTO criteria.

Yes. Inspection team, whether they work for FDOT or contractor, identify shortcomings and work with Firm to Fix. No, big deal! Resolve issues thru good communications. Remember, this is quality based selection!

5.5 What conditions were required to be met before the start of construction?

Depends on what is stated in RFP. Sometimes we tell contractor that he can begin without plans if he is willing to assume risk!

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

No. Use our standard processes including DRB's, Arbitration Board, etc. Had very few problems. First step is to talk it thru, just like normal process.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Have learned so much it is hard to narrow it down! Set clear criteria. Choose best people to help with process. Be willing to change from current processes, take risks, back off from hand holding professionals, focus on outcomes!

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

Fixed price. Sometimes we include unit price adjustments for overruns in certain elements. Depends on how much risk the District wants to assign to D-B Firm.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

Establish simple payout schedule after selection and then pay based on percentage.

6.3 When was mobilization paid and how were mobilization amounts determined?

Same as normal process. Pay based on % completion of project with maximum amount allowed for mobilization (i.e. 10%).

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

Yes. Delivered to job site or other appropriate location. Same as usual.

6.5 Did you limit payment for equipment?

Do not pay for contractors equipment. If you mean equipment incorporated into job, we use standard processes.

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

Same as normal.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

Yes. Same L.D's as normal. Sometimes include incentives. Sometimes use A+B which includes incentives based on contractors time bid.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

In past yes. Not anymore. Changed our standard process to eliminate all this. No!

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

No! Established payout curve after award. Negotiate it out with winning Firm.

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

Yes. Yes. Same as standard processes.

6.11 What were the conditions to final payment?

Same as usual with addition of copy of all engineering documents and a set of as-built-plans.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No comments.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

Generally a part of contractors proposal. Either A+B or via points in the technical proposal.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

Sometimes include A+B which includes an incentive for less than the "B" time bid. Standard L.D's apply as well. Incentive based on normal practices for settling incentives; road user costs, business impacts and inspection costs.

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

Require a CPM schedule as part of the technical proposal. This is part of the grading criteria. If schedule is not acceptable and yet the firm still won the contract, we could withhold award until it was resolved satisfactorily. Also, if during the contract a revised schedule is needed/required and it is not received, we have the authority to withhold pay until it is resolved. We have not had to do this to my knowledge.

7.4 Who owned the float?

As a general rule, it is whoever gets to it first! Or at least that is my understanding as to how it has worked on regular bid jobs.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

We do require updates if significant changes occur. Has not been a real problem to my knowledge.

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No comments.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date: 100%

Proposal date: 100%

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

Have not had a job with R/W required yet. Just received statutory authority to do so. See our D-B guidelines on web. There is a new section dealing with R/W.

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

see 8.2

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

see 8.2

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

As a standard practice, we have master utility agreements with all major utility companies.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

Electrical, sewer, water, phones, and irrigation. We are generally placing the responsibility for relocations/adjusting all of these items on the D-B Form.

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Still learning!

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

As a general rule we do add time for declared emergencies such as hurricanes or floods.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

No! We would pay actual costs for clean up and repairs. Exceptions or limitations would include instances where the D. B Firm failed to use due diligence to secure the site prior to the hurricane hitting.

We do not feel that the contractor is entitled to a profit on catastrophic events. We are trying to minimize his risk but not to guarantee a profit.

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

No!

9.4 How were differing site conditions addressed?

Depends on contract. Have done it both ways or several ways. In some cases we have put all permits, utilities and geotech issues on D.B. Firm. In other cases we have secured permits

up front, identified all existing utilities and conducted substantial geotec surveys. Each project stands on its own, depending on what district wants to do.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

As a general rule, we are assuming the risk in this area.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

We did have this problem on one emergency bridge replacement project that resulted in a \$2.5 Million claim.

9.7 What permits/approvals were obtained by the agency before the proposal due date?
see 9.4

9.8 What permits/approvals were the contractor's responsibility to obtain?
see 9.4

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

see 9.4. On all jobs they are to meet the permit requirements just as they would under regular projects. If, they are required to obtain the permits they must be responsible for the mitigation measures as well. No, problems as far as I know.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Still learning!

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

Use same process that we use on low bid jobs. Very few C.O's on D.B. jobs.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

Same process as we normally use on low bid jobs. It is no different in terms of process, it is just a reality that the RFP eliminates most of the issues we normally pay for as change orders or supplemental agreements.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

Yes! Yes! Same mark-ups as per our standard specs. For more details see sections 4-3 and 5-12 of our standard D.B. specs on the Florida DOT web site under the Construction Office Design Build site. Labor – 25%, materials – 10%, equipment – use Blue Book rates.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

Yes! Yes! Have not done R/W yet. Have not had any VECs to my knowledge.

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No comments

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

Yes! See details on web site. Have a new asphalt warranty (CMAP) that sets Rut, Ride and Crack criteria. Have a more open ended concrete (bridge) warranty clause.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

Yes!

11.3 Was a warranty bond required? If so, how was the amount determined?

In some cases. The new CMAP does not require a warranty bond. It is tied to pre-qualification. If problems, you fix. If you do not, you will no longer be pre-qualified! Looking to expand this to concrete, signals and landscaping.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

No!

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

Depends on contract. As a general rule, they are responsible for all maintenance to items within the scope of work.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

No!

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No comments.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

Up to contractor. Allow up to 70%.

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

No! We are race neutral. We have a statewide goal and have been able to meet it without project level quotas.

12.3 How were EEO requirements addressed?

Same as usual.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

Not a lot of turnover. If there is, they must get our approval on new person to ensure same quality/expertise.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No comment.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

None

13.2 What insurance was provided by the contractor?

Standard stuff that engineers and contractors are always required to have; E & O, workers comp, etc..

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

Not sure. We have so many contracts. Each district puts specifics in their RFP.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

Not sure. Have not heard of any issues in this area.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

See our web site. We do have some project specific RFPs as well as the actual technical proposals for some jobs.

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

We are making changes to our D.B Guidelines monthly as we learn and grow! We add info to our web site weekly it seems, again as we learn and grow.

Greenville County, SC

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **Greenville County Public Works Department** (Engineering/Maintenance Division)

Name of individual: Judy Wortkoetter

Title of individual: County Engineer

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Phone: (864) 467-7010

E mail: jworktoetter@greenvillecounty.com

Date : February 5, 2001

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

In our Procurement Code we use the term "design-build" synonymously with the terms "turnkey" and "construction management." The definition in our Code is this:

Construction management services, design-build services, or turnkey management services are approaches to construction contract management that allow for the selection of a single firm to perform and/or manage the complete design and construction of a project.

We use design-build for the implementation of our annual road improvement program and have used it for the construction of several public buildings.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

Larry Benson (Road) 467-7016 or Rick Brooky (Structures) 467- 7467

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

We have entered our 5th year of using this process for our road program. It has included paving, design, and construction of road projects. The programs have included 97' – 16 million (mostly paving), 98' – 8 million (paving, one major road widening, and a few design projects, one bridge), 99' – 8 million (paving, design, intersection improvements, speed humps, one bridge, finish widening project), 00' -13 million (paving, two bridge, several intersections, minor widenings, designs, speed humps), 01' – 8 million (paving, two bridges, one major widening, several minor improvement, designs)

1.4 Why did the Agency initiate its design-build program?

Due to increased funding for road improvement project over a ten-year period and the desire to maintain existing staffing levels but complete the annual programs in a one-year timeframe. Also, the County wanted better control over the selection of the contractor, i.e., we wanted to move away from using money as a sole selection factor.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

No, State Procurement laws already allowed for this method. County's procurement ordinance did require modifications.

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

Yes, a retired contractor has filed lawsuits every year challenging the need for design/build. Some of the unsuccessful contractors have contacted councilmen expressing concerns with limited competition.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

Yes. We can get more work done within the one-year timeframe and no additional staff was hired. Also, we have generated cost savings and improved quality of the roads.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

A letter of determination that outlines the reasons why design/build is the preferred methods must be prepared by staff and approved by county council. Copies of some of these letters are attached.

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

See the RFP for the process and selection criteria. No "report" on results exists. However, we do have information as to cost savings. This information is attached. Also, the determinations that are attached contain some information regarding the success the County has had using design build.

1.10 Do you plan to proceed with additional design-build projects? If not, why?

Yes, if council continues to back this method. Some have expressed concern with the fees paid for project management services.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

For the roads projects we have used this method to pave over 800 roads & correct associated drainage. We have installed speed humps, repaired sidewalk, built new sidewalk, and installed guardrails. Four bridges, six intersections, two major road widenings, and four minor widening projects have been completed using this method. Modern Continental has been chosen five years in a row to complete this work as project manager. TranSystem has been the Design Firm with F&R and Law acting as these geotechnical. Ashmore Brothers has been the principal paving firm and built a few of the road improvements. Taylor/ Murphy has constructed the bridges along with some of the road improvements. Several other contractors have also had parts in the construction projects.

With regard to the capital improvement projects, the contractors are as follows:

<i>Courthouse and Parking Garage:</i>	<i>Fluor Daniel</i>
<i>Detention Center Work Camp:</i>	<i>Cely Construction</i>
<i>Family Court Renovation:</i>	<i>Cely Construction</i>
<i>Forensics Lab Renovation:</i>	<i>Modern Continental South</i>
<i>Main Library:</i>	<i>Kahn Construction</i>

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

See 1.3 The only changes would have been for small C fund projects added during the contract period. C funds are state gas tax dollars to address minor road projects.

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

To upgrade our worst pavement condition roads and address growth related issues. Also, we wanted to minimize staff pressures so that we could continue to provide other services.

2.6 Did design-build help the Agency meet its goals? How?

Yes. By allowing us to complete a lot of paving and construction work in a one-year timeframe. Also, the contractor in essence "supplemented" County staff, allowing staff to perform normal services during the course of the roads project.

2.7 Describe the process used to identify risks and minimize the impact of risks.

Staff developed a detailed RFP, which outlined the County's goals and expectations. It includes construction specification and scope of services. A Pre-bid meeting is held to again detail our expectations.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what were the timesavings and how was this determination made?

Yes, the time saved by not having to develop and select separate RFP's for multiple design projects, one firm coordination all elements (design, utility coordination, right of way acquisition) of construction and eliminating bids for each individual construction projects. The timesavings have not been quantified.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

Lower cost – see some of the tables that showed some of the savings. This was done by utilizing DBE/MBE more, value engineering, 100% of the savings returned to County to be used on other projects.

2.10 How was the project funded?

Combination of road maintenance fees and GO Bonds.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.

No

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

Several larger road-widening projects were phased over several years, mainly due to right of way and utility relocation timeframe. We outlined the scope in the RFP by description, plans, and quantities.

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

Utility Providers – Included them in weekly meetings, attend monthly area utility coordination meeting, and involve them in design process (early).

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

Pre-bid meeting held, Proposals reviewed by a team, negotiations held with the selected team to determine fees.

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

Yes, modifications to the RFP were made and better “buy in” by construction community when outside construction professionals include their ideas and suggestions.

3.3 How many firms were shortlisted? How many proposals were received?

Only two firms submitted proposals each year.

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

Selection criteria outlined in the RFP, score system set up to evaluate if proposal meets the criteria, each team member score the proposal separately. Group discussion and ranking held.

3.5 If negotiations were part of the process, were they useful? Please explain.

Yes, negotiations are held after group ranking. Was able to reduce some budget items set for design and quality control services.

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

N/A

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

We allow for the selected firm to provide us with a proposal requesting changes; this allows for new technologies. The proposal must outline how it would benefit the county either in saving cost or time, or improving quality.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

No

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

Approximately two weeks (see the RFP for the timeline) The reviewers included four county staff members and three outside construction “experts”.

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

Price was not evaluated during the selection process. Price was negotiated after selection. If negotiations had not been favorable with the top-ranked proposer, we could then move to the second ranked proposer.

3.11 Were there any protests? If so, please describe the circumstances and results.

No formal protests. One company FOIA'd the winning team's proposal and hired their own engineer to review. This engineer sent letter to each councilperson outlining his opinions on the process.

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

An independent auditor must sit in on the selection process meeting and certify that it was a fair selection. The Purchasing manager develops a letter to the Administrator outlining the selection teams findings.

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Since this is a 10-year program I would like to include more than one year in the program. The county has gone to a two-year budget cycle and would like to see the road program mirror this cycle.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

The design plans and quantities of major construction projects, completed in the previous year's program, are included in the package..

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

See the table of contents for the RFP.

4.3 Did you use prescriptive or performance specifications? How were they developed?

Both, staff prepares them.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

Yes, included as attachments. For the design build project no base configuration. For the projects that designs were included in the package they must comply with plans unless they could show major savings of time or dollars.

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

Yes, the team's design firm provided us with project cost estimates. These were used to compare when developing the contract cost and reviewed upon completion of the project.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Go to a two-year program.

5. PROJECT MANAGEMENT

5.1 How was the project managed?

The team is lead by a program manager (Modern Continental South, a construction firm, has been selected the last five years), which acts as a project manager. The rest of the team is made of several contractors, design firms and geotechnical firms. Modern provides overall coordination between the teams and utility agencies.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

During Design the staff engineer meet with the designers in the field to develop project scope. County staff will provide plan review comments and final sign off of the plans. Two Inspectors provide "trouble shooting" and spot checks of the paving and construction aspects of the project. Weekly coordination meetings are held with all sub's and inspection staff. A bi-monthly meeting is held with the Project Manager and the County Engineer. A monthly meeting is held with key team members and county staff to discuss any hold ups or problems. In house attorneys only review the contract document prior to signature.

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

Kick off meeting held to discuss perceived problems and issues that need to be addressed. Concept plans (with alternatives) are developed with preliminary cost estimate. Staff reviews this concept and then a public meeting is held. Survey and preliminary design are completed. Field visit is made with design team, project manager and county staff engineers. Final plans developed incorporating public comments and county staff's.

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

The geotechnical firm provides inspectors for each project and at each site where some type of paving operation is taking place on. The design firm has a special construction engineer on staff that makes periodic inspections and addresses field problems if they arise. County staff will meet with the construction engineer, geotechnical inspector, and Project Management QC person to resolve issues that arise in the field.

5.5 What conditions were required to be met before the start of construction?

The Assessment for the roads scheduled for paving had to be completed, reviewed and approved by county staff before any work was started.

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

If something is found in the field that was not addressed on the plans this would be reviewed and discussed with the Project Manager based upon the findings of the Design Firms Construction

Engineer. If changes were necessary that cost money contingency funds (set aside to cover this type of problems) will be used once county staff signs a concurrence letter. Usually the county's inspector was on sight for these issues and is familiar with the problem and the potential solutions.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

no

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

The Contract is fixed price (not to exceed price) but as a part of the contract each project has a dollar established that a contractor has already committed to perform. Contingency is set aside to cover the unexpected.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, and schedule of values, unit prices, price centers or some other method?

Invoices are submitted monthly with projects being paid on a unit cost basis. Payment to residents for land/right of way compensation is directly billed to the county and we pay the citizen directly.

6.3 When was mobilization paid and how were mobilization amounts determined?

Construction projects have mobilization as a line item built into the project cost. Mobilization is built into the unit cost (per ton) of asphalt for the paving projects. Longer paving projects will warrant a better per ton price.

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

no

6.5 Did you limit payment for equipment?

no

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

no

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

no

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

No, performance bond is the only item required.

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

N/A

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

N/A

6.11 What were the conditions to final payment?

Final sign off by the appropriate county staff member on the specific projects.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

no

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

Yes, the one-year deadline is required.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

no

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

A schedule is submitted as a part of the RFP response. This is revised and included as a part of the contract.

7.4 Who owned the float?

I guess the contractor. This has never been discussed.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

no

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

no

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

98/99 – 0%; 99/00 – 0%; 00/01 – 0%; 2001/02 - approximately 50%

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

One member of the team is the right of way negotiation firm. The Design Team manages their activities and works with appraisers and title certification specialist.

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

See 8.2

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

Design team gets the preliminary plans to the utility companies and asks for their input of the cost of the construction impact. Since we have an agreement with the electrical company regarding "prior rights" we pay 70% of the total electrical relocation costs. With the impact costs the team can decide if cost of design and construction changes would outweigh the electrical relocation costs. Final plans are then sent to the utility companies outlining the proposed construction schedule and asking for them to verify whether they can meet the proposed schedule. Potential problems are discussed with the team/county staff. Depending on urgency county staff may try to intervene with the utility provider otherwise the construction schedules are revised.

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

Only with the electrical company. The rest we must rely on the agency good will.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

Sewer, Electrical, Gas, Telephone, & Cable. Stormdrain and irrigation are considered moving expenses in the project costs.

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Wish I could get Bell South (telephone) into an agreement so we could ensure a timely response for this agency.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

yes

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

no

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

no

9.4 How were differing site conditions addressed?

Yes, responsibility of the design/build team to resolve.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

We have been extremely lucky – it has not been an issue to date.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

See 9.4

9.7 What permits/approvals were obtained by the agency before the proposal due date?

Team effort to identify permit needs during the design phase and how it will effect the schedule. If time for review and approval effects the schedule then design changes are made to stay with compliance with federal regulations.

9.8 What permits/approvals were the contractor's responsibility to obtain?

SCDOT Encroachment, FEMA (No Rise certificates), Corp of Engineers (Wetlands)

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

Has not happened to date – put hopefully we would have enough geotechnical information to determine early in the projects. Full compliance with regulations would be required. This could change the scope of the project, cost and timeframe. We would make allowance for these types of field problems.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

no

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

The County Engineer must sign a letter of concurrence.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

No extra compensation is added to the contract amount. The Project Manager must work within the established contract amount. Project Manager will shift money within the contract amount with concurrence from county Engineer. With appropriate documentation to justify time extensions we have given two time expansions in the past. Both were due entirely to utility hold ups and right of way negotiation issues that council people got involved in.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

We have only done this once when to stay within a budget set for a bridge project they used their own crews to do the work instead of one of the team contractors. No mark up was added.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

Value engineering is expected but not negotiated as part of the contract. Value engineering is performed routinely by the Project Manager – all savings come back to the County to use for other projects. (I have included a list of extra projects that we did with savings)

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

no

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

See page 6 of 10 section H. Warranty and Corporate Guarantee of the contract.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

See 11.1

11.3 Was a warranty bond required? If so, how was the amount determined?

See 11.1

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

So far, only one defect occurred and it was determined that a leaky dam upstream lead to pavement deterioration.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

See the warrenty period outlined in the contract that starts from the date the road paving or contruction project was accepted by county.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

Only minor grassing or shoulder work.

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

See the contract document.

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

No changes were made to existing policies. We ask them to establish what DBE % they would have.

12.3 How were EEO requirements addressed?

See RFP and contract.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

In four years of using the same Project Manager they have only had one turn over two of the critical positions of Project Manager & Budget Controller. The project managers had extensive experience in road construction.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

none

13.2 What insurance was provided by the contractor?

See contract document.

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

In the 2000/01 & 2001/02 – yes. Prior to this we only required bonds to cover the construction dollar amount and not the professional/design services.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

N/A – but we would not hold the contractor responsible for this.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

See contract

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

NAVFAC

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC)

Name of individual: Richard C. Viohl, Jr. RLA

Title of individual: Engineering Practices/Acquisition Strategies, Chief Engineer's Office

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Date: Jan 17, 2002

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

Design-Build (DB) has become an effective acquisition tool that has had positive effects on acquisition and construction time, project costs, administrative effort, construction quality, and has improved contractor innovation and use of emerging technologies. It has become NAVFAC's procurement strategy of choice. Its use, however, is always based on an evaluation of alternative approaches available.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

Frances Sullivan (Mission Support, Acquisition Office) 202-685-9146

Bob Silver (ROICC Advocate, Engineering Operations Center) 202-685-9215

Mike Chapman (Design Policy/Architecture, Chief Engineer's Office) 202-685-9175

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

This survey is being answered based on the Military Construction (MILCON) projects for which NAVFAC is the design and construction agent. MILCON projects cost from \$750,000 to as much as \$50 million or more, typically averaging around \$5 million. The annual MILCON program averages approximately \$1.2 billion. Programs include a broad spectrum of types of facilities, including operational, training, bachelor housing, community, utilities, and other infrastructure.

NAVFAC's use of the DB acquisition approach has risen sharply the last several years to where it currently represents 60% of the MILCON program (by number of projects). It is anticipated that DB use will remain at that level or increase slightly for the foreseeable future.

1.4 Why did the Agency initiate its design-build program?

We are continually seeking to improve our acquisition methods, be innovative and increase our flexibility in executing our varied MILCON projects. Design-build is only one of a number of new ideas that have been explored over the past several years. Design-build offered both the potential for saving time and money by having a single contractor provide both the design and construction in a non-stop process, and the potential to reduce claims by having a single entity responsible for coordination between plans, specifications and submittals.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

Yes. Before fiscal year 1996 DOD had authority per Title 10 USC Section 2862 to utilize a one-step turnkey selection procedure for a very limited number of projects each year in order to combine design and construction of a MILCON facility into a single contract. In fiscal year 1996 Congress provided additional unlimited authority per Title 10 USC Section 2305a (commonly referred to as the Clinger-Cohen Act) to utilize a two-phase selection procedure for entering into a single contract for design and construction. Today this authority represents approximately 95% of NAVFAC's DB procurements.

The revised legislation was the product of lobbying by the professional organizations representing the design and construction industries.

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

Initially there was resistance from a number of architectural/engineering (A/E) firms and their professional associations. They were concerned that their services would no longer be directly contracted for and that they would be relegated to a subservient role as subcontractors under prime construction contractors. They were encouraged to form partnerships with construction firms and to modernize their business model to get onboard with changing times and new opportunities. In addition, it was stressed that the new DB method would never be applied to all projects in a "one size fits all" rigid application. They were assured that the traditional design-bid-build (DBB) method would continue to be the most appropriate procurement approach for a significant number of projects.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

Yes, though it has been difficult to develop specific numbers. Time savings have been achieved provided the project life cycle from RFP development to construction completion is unbroken, i.e. no statutory, regulatory or programmatic roadblocks are encountered. There has been a dramatic reduction in claims. Cost savings have been difficult to measure as low price is no longer the single determining selection factor. Innovations in design solutions and construction techniques have been realized. Quality is on a par or better compared with the traditional DBB approach. The in-house labor requirement is largely unchanged with increased front end RFP development and source selection efforts balanced by less back end claims processing.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

NAVFAC reviews each project to formulate an acquisition plan based on the specific circumstances of that project. Experience indicates design-build can be a successful strategy when all or most of the following are true:

- a. Project scope is well defined;*
- b. Project requirements for the most part can be stated as performance specifications;*
- c. Project value is sufficient to attract competition;*
- d. Project location, security requirements or other factors will not overly restrict competition;*
- e. Little or no design is required in order to advertise the design-build contract;*
- f. Completing NEPA requirements will not significantly delay contract award;*
- g. A different acquisition method would not produce better pricing, life cycle cost or overall time;*
- h. There are no acceptable plans and specifications from another similar project that can be re-utilized with minimal effort;*
- i. The client is on board with using this approach.*

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

Example documents are available at NAVFAC's electronic solicitation (ESOL) web site by registering at <http://esol.navy.mil/>.

NAVFAC's evaluation procedures comply with the Federal Acquisition Regulations (FAR) and Defense Acquisition Regulations (DFARS). The most relevant sections are Part 36.3, "Two-Phase Design-Build Selection Procedures," and Part 15, "Contracting by Negotiation." NAVFAC has issued some additional source selection guidance in its P-68 Contracting Manual available at <http://www.navy.mil>. Working within that framework, our operational offices define evaluation procedures that best suit their procurements.

Currently no reports on our DB program are available.

1.10 Do you plan to proceed with additional design-build projects? If not, why?

Yes. As stated earlier, we expect about 60% of our MILCON projects each year will utilize the DB approach.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

N.A.

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

N.A.

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

Our goals were to improve schedule performance, maintain or improve quality, enhance innovation, and reduce cost growth.

2.6 Did design-build help the Agency meet its goals? How?

Yes. As described earlier, time savings, cost savings and innovation have been achieved while maintaining quality and not increasing in-house labor requirements.

2.7 Describe the process used to identify risks and minimize the impact of risks.

NAVFAC uses a Functional Analysis Concept Development (FACD) procedure for all projects at the beginning of the design phase to identify potential problems and reduce risk. FACD combines system design and costing with value engineering methodology in an architectural charrette format. It is a concentrated study that employs an iterative and interactive process utilizing a wide variety of tools (e.g. studies, ad hoc workshops, focus groups, brain storming, cost modeling, value analysis, mind mapping, role playing, etc.)

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?

Yes, however this has been difficult to quantify since each project is unique, and it is difficult to say how long it "would have taken." There are many variables that make a direct comparison between DBB and DB difficult. However, considering the time elapsed from the start of design through project completion, it is apparent that we have achieved dramatic time savings through DB. Anecdotal data shows as much as a two-thirds reduction in total time on some projects. A traditional construction contract starts with a completed design while the DB contract must first expend time designing, however, even considering this we have experienced construction time savings. Design-build has fewer and shorter delays due to contract changes and claims. Construction in a DB contract can also be incrementally started (e.g. site work begun) before the entire design is completed leading to further time savings.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

Again, this has been difficult to quantify because of all of the variables. In general, we believe DB has reduced overall cost, though not significantly and to a lesser degree than the time savings that have been achieved.

2.10 How was the project funded?

MILCON projects are individually authorized and appropriated by Congress. A MILCON appropriation has a five-year life for incurring new obligations.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.

MILCON design and construction funds are received as two separate appropriations from Congress. Appropriation law and DOD Financial Management Regulations stipulate that only construction funds can be used on a construction contract, and a DB contract is considered a construction contract. Therefore, we had to readjust how we budget for construction funds for the DB portion of our MILCON program in order to pay for the contractor's design cost (estimated to average approximately 4% of the estimated cost of construction) with construction funds. This change took several years to accomplish. During the interim we had to deal with a growing surplus of design funds and a corresponding burden on our construction funds due to the unbudgeted contractor's design cost.

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

Project phasing can be interpreted several ways. We currently use a two-phase procurement process for most of our DB projects. The first phase typically narrows the competitive field to no more than 5 of the most qualified and experienced contractors, also minimizing the impact of the effort upon the DB contracting community. The second phase selects the best value technical proposal. We also phase projects in the sense that a limited number of high-dollar projects (i.e. \$30 million or more) may seek phased appropriation over two or more consecutive years if total project funding is not required during the first year of construction, and complete and useable segments of the total facility requirement can be identified. The second and following funding phases are handled as options to the basic contract.

Once we award a DB contract or option, however, we do not phase or segment the design and construction effort within that contract or option.

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

Our FACD procedure (discussed earlier) identifies all stakeholders and ensures their needs are recognized early on in the project. A project team, representing a cross section of key players, is established that carries on through the life of the project to ensure these needs are met. Team members typically include the authorizing agent (funds manager), facility owner/user, NAVFAC project leader, contracting officer, and field office representative.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (Pre-qualification? Short-listing? Industry review? Pre-approval of alternative technical concepts? Preliminary proposals + discussions + final proposals? BAFO? Negotiations?) How much time did each step take?

The general process follows the two-phase approach authorized in FAR Part 36.3, "Two-Phase Design-Build Selection Procedures." Phase I: Request for Qualifications (1 month solicitation typical) and review/selection of no more than 5 contractors (2 weeks). Phase II: Request for Proposals (1 month solicitation), evaluation, exchanges, revisions, and selection (from 6-8 weeks typically). Total procurement process averages approximately 4 months.

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

We have used industry reviews of draft RFPs very successfully. These forums have resulted in better RFPs and better industry understanding of our requirements.

3.3 How many firms were short-listed? How many proposals were received?

Typically, the two-phase process narrows the field in the first phase to no more than 5 of the most qualified firms from which to seek technical and price proposals. The total number of proposals received varies by project.

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

We use a best value approach. Phase I evaluation is usually based on the following four areas of consideration: (1) past performance, (2) small business subcontracting past performance, (3) technical qualifications (design and construction) and (4) construction management approach. Phase II typically evaluates technical factors including past performance (same as Phase I unless conditions change), small business subcontracting effort (specific to the project), technical qualifications (same as Phase I unless conditions change), technical solution, and the price proposal. Selection of the "best value" proposal is made based on the relative importance of technical factors and price as specified in the RFP.

3.5 If negotiations were part of the process, were they useful? Please explain.

Negotiations strengthen the Government's ability to obtain best value. During negotiations, the Government identifies aspects of an offeror's proposal that it considers weak or deficient. Offerors revise their proposals based on that feedback. Negotiations result in revised proposals with fewer, if any, weaknesses or deficiencies.

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

Final proposal revisions/BAFO's are requested at the completion of negotiations so that offerors can revise their proposals to reflect changes resulting from negotiations or any changes made to the RFP requirements through amendments issued after initial proposal receipt. Final proposals are almost always stronger than initial proposals because the Government has identified for the offerors during negotiations those areas of their proposals that need improvement.

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

NAVFAC, by making maximum use of performance-based specifications in its solicitations, provides offerors with tremendous flexibility in their proposals. In addition, offerors that provide technical proposals that exceed the technical parameters in the solicitation can be considered for award. However, we will not award to a contractor that does not comply with the minimum requirements in the RFP. Sometimes we will revise our RFP requirements to permit the proposed deviation; other times we will not.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

NAVFAC does not utilize stipends.

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

Phase II technical/price proposals typically take about three weeks to review or longer if oral presentations and/or discussions are employed. The review process includes the following entities:

Technical Evaluation Board (TEB) - typically 2-5 members

Price Evaluation Board (PEB) - typically 1-3 members, concurrent with TEB

Source Selection Board (SSB) - typically 2-5 members, recommends best value proposal based on TEB & PEB inputs

Source Selection Authority (SSA) - 1 person, makes final determination of the best value proposal

3.10 Describe how you evaluated the price and technical proposals in making the selection. (Relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

About 7 years ago NAVFAC abandoned a point scoring system based on equating \$ to quality points because it was difficult to administer and defend. An adjectival grading system was adopted to evaluate technical factors and is currently used. Technical proposals are generally evaluated in terms of being exceptional/outstanding, acceptable/satisfactory, marginal/deficient but correctable, or unacceptable. Price is usually evaluated inclusive of options. The RFP always specifies the relationship between technical factors and price and it varies by project. Price and technical factors are equal for the majority of our design-build procurements. Occasionally, technical factors are considered significantly more important than price. Even less often price is considered significantly more important than technical factors.

Best value is determined by evaluating whether the price increase of one acceptable proposal compared to the next lower priced acceptable proposal is commensurate with an increase in the ranked technical quality of the higher-priced proposal. When the next higher price is not matched by a commensurate increase in technical quality, the previously observed proposal is the "best value" and the contract may be awarded to that proposer.

3.11 Were there any protests? If so, please describe the circumstances and results.

There have been fewer protests since we adopted design-build acquisition strategies.

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

NAVFAC policy is to not award a construction contract (including a DB contract) before the NEPA process has been completed, including the issuance of a ROD if required. Occasionally, a RFP may be issued and proposals reviewed before the NEPA process is completed in order to maintain a critical schedule. The decision to proceed in this case is a best business decision balancing the risk against other factors. Typically, any requirements materializing after RFP issuance are handled through amendments to the solicitation.

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N.A.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

It varies by project and has also evolved over time. During our early years of DB experience projects typically included 35% or more defined design solutions in the RFP. It was difficult for our clients to accept more risk in not knowing what the final design solution would be, and NAVFAC itself was less willing to trust that a contractor could produce an acceptable end product without significant direction. Over time our clients and we have become more confident with this procurement method and have had positive results from reducing the degree of design definition in the RFP. While it still varies by project, our overall goal is to include the minimum design drawings necessary in the RFP to convey the project requirement to proposers, to acquire non-Navy government agency approvals, and/or to satisfy specific mission related customer restrictions. Currently, the degree of design in our RFP's can be characterized as typically falling somewhere between a concept design and 35%. A relatively simple project would have little or no design, a moderately complicated project might have the equivalent to 15% (concept) design, and a fairly complex project might have 35% or slightly higher definition. Experience is showing that we are most successful when we minimize the use of drawings (defining the solution) and spend more time on the project program (defining functional and technical criteria.)

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

Our RFP's are generally organized by the following components:

- 1) Proposal Forms, FAR Clauses and Instructions to Proposers*
- 2) General Requirements (facility program, Division 1 and design requirements)*
- 3) Performance Specifications*
- 4) Prescriptive Specifications*
- 5) Additional Documentation (technical information such as surveys, soils reports, permits, environmental documentation, drawings, diagrams, pictures, etc.)*

4.3 Did you use prescriptive or performance specifications? How were they developed?

It varies by project. Our policy is to always use performance specifications to the maximum extent possible in order to take full advantage of the efficiencies and innovation available through this procurement approach. The general trend over the past several years has been to rely less and less on prescriptive specifications. We expect this overall trend to continue, though it will still vary by project.

NAVFAC's performance specifications were both developed in-house and adopted from commercial industry.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

Yes, the proposal becomes part of the contract. The contract also establishes an order of precedence that states that, in the event of a conflict between the specifications and the contractor's proposal, the provision most advantageous to the Government will govern.

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?
No. NAVFAC DB solicitations assume that adequate price competition will exist. Price reasonableness is based on price analysis, typically a comparison of the price to other competitive price offers and the government estimate.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N.A.

5. PROJECT MANAGEMENT

5.1 How was the project managed?
Accomplished by in-house resources.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

The RFP, and any design included with it, is prepared either in-house or by outside consultants. Contractor proposals are evaluated by in-house resources. The subsequent review of the contractor's design is done by either NAVFAC or outside consultants. In-house resources perform construction oversight.

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?
It varies, but after DB contract award, typically submittals are required at 35%, 90% and final design stages. NAVFAC does "approve" the design, but only in the sense of accepting the design as being in conformance with the RFP.

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?
The contractor is responsible for providing a construction quality control (CQC) process. Enforcement is through government quality assurance. In general, we have not experienced any appreciable change in either design or construction quality, but we have experienced a significant reduction in conflicts and disputes.

5.5 What conditions were required to be met before the start of construction?
A 100% (final) design is not always required before the start of construction. It can vary by project. We also employ "fast track" design and construction where parts of the design are approved and notices to proceed with construction of the approved system(s) is given prior to complete design acceptance. Occasionally we also utilize unrestricted notice to proceed where we give the contractor latitude to proceed with construction prior to any required Government design acceptance. In the latter case, the Government still accepts the design ultimately, but the contractor is given the latitude to proceed at his own risk.

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.
No, we do not have a different process for DB from that for traditional DBB procurements.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N.A.

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?
Generally fixed price, no allowances. We maintain a small amount for contingencies.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?
Invoicing is based on progress. Payment and invoicing process are in accordance with FAR Clause 52.232-5, "payments under Fixed-Price Construction Contracts."

6.3 When was mobilization paid and how were mobilization amounts determined?
Mobilization is generally paid, but we make sure there is not too much front end loading.

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?
We generally pay for materials delivered on site. We sometimes pay for materials not yet placed when they meet certain criteria such as properly stored in a secure and bonded facility.

6.5 Did you limit payment for equipment?
N.A.

6.6 Did you withhold retainage? What percentage? At what point was retainage released?
We do withhold retention/retainage up to 10% of the payment. The actual amount varies by project.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.
We do not utilize award fees/incentives for contractor performance other than for schedule, and we only utilize them for schedule occasionally. We only assess liquidated damages for failure to meet the schedule, and we almost always use this tool in order to compensate the Government for probable damages if the schedule is not met.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?
N.A.

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?
In general there are no limits on the total amount payable. However, NAVFAC policy limits progress payments for work performed during the project design phase to 4% of the contract price. In addition, federal policy limits progress payments to 80% of work accomplished on undefinitized contract actions.

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?
N.A.

6.11 What were the conditions to final payment?
As provided in FAR clause 52.22-5, "Payments under Fixed-Price Construction Contracts," these are the conditions to final payment:
 (1) *completion and acceptance of all the work;*
 (2) *presentation of a properly executed voucher; and*

- (3) *release of all claims against the Government except those, in specific amounts, specifically excluded.*

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N.A.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

Completion deadlines are included in the RFP and can be fixed either by the RFP or by the proposal. If by the proposal, the schedule is one of the technical evaluation factors.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

NAV FAC does not utilize early completion incentives, but does utilize liquidated damages to compensate the government for probable damages attributed to contract delinquencies. Liquidated damages are identified by a schedule in the contract. The rates are based on the reasonable forecast of compensation for the harm caused by late or untimely delivery. The rate includes the cost of Government inspection and supervision and other expected expenses associated with the delay (i.e. housing allowances incurred, lost revenue, etc.).

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

Detailed schedule submittals are required and monitored as part of the contract.

7.4 Who owned the float?

The contractor owns the float as long as the performance period meets the contract requirements.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

N.A.

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N.A.

8. RIGHT OF WAY/UTILITIES

This section is not applicable. MILCON projects are either sited on government property or include the land purchase. There are rarely any ROW issues.

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date: Proposal date:

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

NAVFAC follows the Federal Acquisition Regulations (FAR) with regard to force majeure. FAR clause 52.249-10 lists some examples of the unforeseeable causes of delay beyond the control and without the fault or negligence of the contractor that would permit a time extension.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

No. NAVFAC does not provide for price increases for force majeure events.

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

N.A.

9.4 How were differing site conditions addressed?

They are considered changed conditions and result in equitable adjustments as provided for in FAR clause 52.236-2, "Differing Site Conditions."

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

As changed conditions, if appropriate.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

N.A.

9.7 What permits/approvals were obtained by the agency before the proposal due date?

Varies by project.

9.8 What permits/approvals were the contractor's responsibility to obtain?

Varies by project.

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

Yes, contractor is given responsibility, and compliance is enforced.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N.A.

10. CHANGE ORDERS

This and the following sections are generally not relevant to comment on since we follow FAR procedures.

10.1 Describe the process followed for changes directed by the owner.

Changes directed by the owner are usually considered "new work" and added to the contract through a bilaterally negotiated contract modification. The proposal/estimate for the contract modification is usually submitted using NAVFAC form 4330/43, "Proposal/Estimate for Contract Modification." The indirect overheads used to price the proposal are often established in the basic contract. In rare circumstances, the contracting officer may authorize the work, prior to the negotiation of a bilateral modification, using an unpriced change order with a not-to-exceed ceiling price. The unpriced change order is definitized after work has begun.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

NAVFAC makes every effort to resolve all contractual issues in controversy by mutual agreement at the contracting officer's level. We also make extensive use of various Alternative Disputes Resolution techniques to resolve contractual issues in controversy. In cases where early resolution efforts are unsuccessful, contractor claims are handled in accordance with the procedures in FAR Subpart 33.2, "Disputes and Appeals." Our procedures require a Level III contracting officer issue the final decision for all claims under \$1,000,000. Although claims over \$1,000,000 must be referred to NAVFAC Headquarters, normally Headquarters delegates the authority to settle the claim to a Level III contracting officer.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

Work is generally not performed on a time and materials basis. Normally, additional work is added to the contract through a bilaterally negotiated contract modification. The proposal/estimate for the contract modification is usually submitted using NAVFAC form 4330/43, "Proposal/Estimate for Contract Modification." (copy attached at end of survey). The indirect overheads are nominally established based on NAVFAC's experience of reasonable indirect rates. Deviations from the NAVFAC-recommended rates are subject to negotiation, as are the rest of the price elements. Increasingly, contractors are required to propose the direct rates, indirect rates, and profit rate that will be used to price contract modifications. These proposed rates are evaluated during the competition as part of the price evaluation for contract award. These competitively established rates are then made part of the contract award.

In rare circumstances when the work needs to be initiated before a bilateral modification can be negotiated, the contracting officer may issue an unpriced change order. An unpriced change order must include a not-to-exceed ceiling price. Unpriced actions below \$100,000 may be approved by a contracting officer; unpriced actions below \$1,000,000 may be approved by the Commanding Officer or Chief of the Contracting Office at the Engineering Field Division; unpriced actions over \$1,000,000 must be approved by Headquarters' Director of Acquisition.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

NAVFAC includes FAR clause 52.248-3, "Value Engineering - Construction" in its contracts. Roughly, the clause establishes the Government's share of savings as 45% for fixed-price contracts.

10.5 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N.A.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

NAVFAC contracts, in accordance with the FAR Clause 52.246-21, "Warranty of Construction," normally require the contractor to warrant that work performed under the contract conforms to the contract requirements and is free of any defect in equipment, material, design furnished, or workmanship performed. The warranty period is normally one year. The warranty requires the contractor to remedy any failure to conform or any defects as well as any damage to Government-owned or controlled real or personal property resulting from the contractor's failure to conform. In addition, the contract requires the contractor to obtain the customary warranties from all subcontractors, manufacturers and suppliers. A Level III contracting officer must make a written determination documenting any extra warranty protection that is included in the contract.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

No. The warranty clause does not limit the Government's rights under the Inspection and Acceptance clause with respect to latent defects, gross mistakes, or fraud.

11.3 Was a warranty bond required? If so, how was the amount determined?

No.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.
No.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?
The contractor does not have maintenance obligations.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?
In general, the scope of NAVFAC's design-build contracts does not include any post-completion maintenance. NAVFAC has begun to experiment with including requirements for post-completion maintenance in some of its new construction projects. Any post-completion maintenance requirements are included as options.

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N.A.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?
Varies by project.

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?
No changes were made to NAVFAC's standard policy to address design-build.

12.3 How were EEO requirements addressed?
FAR clause 52.222-27, "Affirmative Action Compliance Requirements for Construction," establishes the EEO requirements for the contract. The Department of Labor's Employment Standards Administration's Office of Federal Contract Compliance Programs establishes goals and specifies affirmative action that must be undertaken by the contractor. The contractor does not have to develop a written affirmative action program. Instead, the contractor must make good faith efforts to increase the utilization of minorities and women in the skilled trades. The national goal for female participation is 6.9%. Minority participation goals vary geographically.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.
NAVFAC has had good experience with the capability and stability of its contractor key personnel. Turnover has not been a problem.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
N.A.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?
None.

13.2 What insurance was provided by the contractor?
FAR Part 28 requires the following minimum insurance requirements: Workers' compensation as required by federal and state workers' compensation and occupational disease statutes; employer's liability coverage of at least \$100,000; bodily injury liability insurance coverage of at least \$500,000 per occurrence; automobile liability coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage.

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

Yes. NAVFAC requires 100% performance bonds.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

N.A.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

No.

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

N.A.

PROPOSAL/ESTIMATE FOR CONTRACT MODIFICATION

DATE:

NAVFAC 4330/43 (8/88)

CONTRACT TITLE:

CONTRACT NO:

ROICC OFFICE:

DESCRIPTION:

		PRIME CONTRACTOR'S WORK		Revisions/Comments
1.	Direct Materials			
2.	Sales Tax on Materials	% of line 1		
3.	Direct Labor			
4.	Insurance, Taxes, and Fringe Benefits	% of line 3		
5.	Rental Equipment			
6.	Sales Tax on Rental Equipment	% of line 5		
7.	Equipment Ownership and Operating Expenses			
8.	SUBTOTAL (add lines 1 - 7)			
9.	Field Overhead	10.00% of line 8		
10.	SUBTOTAL (Add Lines 8 & 9)			
Prime Remarks:				

		SUB-CONTRACTOR'S WORK		Revisions/Comments
11.	Direct Materials			
12.	Sales Tax on Materials	% of line 11		
13.	Direct Labor			
14.	Insurance, Taxes, and Fringe Benefits	% of line 13		
15.	Rental Equipment			
16.	Sales Tax on Rental Equipment	% of line 15		
17.	Equipment Ownership and Operating Expenses			
18.	SUBTOTAL (add lines 11 - 17)			
19.	Field Overhead	10.00% of line 18		
20.	SUBTOTAL (add lines 18 & 19)			
21.	Home Office Overhead	3.00% of line 20		
22.	Profit	% of line 20		
23.	SUBTOTAL (Add Lines 20 - 22)			
Sub's Remarks:				

		SUMMARY		Revisions/Comments
24.	Prime Contractor's Work (from line 10)			
25.	Sub-contractor's Work (from line 23)			
26.	SUBTOTAL (add lines 24 & 25)			
27.	Prime Overhead on sub-contractor	5.00% of line 25		
28.	Prime's Home Office Overhead	3.00% of line 24		
29.	Prime's Profit	% of line 26		
30.	SUBTOTAL (add lines 26 - 29)			
31.	Prime Contractor's Bond Premium	% of line 30		
32.	TOTAL COST (Add Lines 30 & 31)			
Estimated time extension and justification				

Prime Contractor name:

Sub-contractor name:

Signature & Title of preparer

Date

INSTRUCTIONS FOR PREPARING PROPOSAL/ESTIMATE FOR CONTRACT MODIFICATION

All Contract Modification Proposals shall be addressed to the Resident Officer in Charge of Construction. Proposals must clearly state the conditions and scope of the modification and shall be accompanied by a breakdown of cost, as indicated. Lump sum costs will not be accepted in either the prime or sub-contractor's breakdown of direct cost. The total cost for labor, material, and equipment rental (or ownership) for each item shall be transferred in the corresponding item on the front of this form. At the contractor's option, the overhead rates printed on the front of this form may be used for proposals under \$ 500,000 in lieu of detailed itemized estimates of overhead costs. The proposal should also include a request for an extension of time, in calendar days, only if overall completion of contract is impacted by the proposed modification. The contractor shall not proceed with any of the work included in the modification prior to receipt of an executed modification of contract (SF30).

BREAKDOWN OF DIRECT COSTS

Contract No.

Date:

ITEMS OF WORK FOR Prime Contractor	QTY	UNIT	MATERIAL		LABOR		R O	EQUIPMENT		
			Unit Cost	Total Cost	Unit Cost	Total Cost		Days	Rate	Total
DIRECT Prime Contractor's TOTALS							R	Total (Rental)		
							O	Total (Owned)		

ITEMS OF WORK FOR Sub-contractor	QTY	UNIT	MATERIAL		LABOR		R O	EQUIPMENT		
			Unit Cost	Total Cost	Unit Cost	Total Cost		Days	Rate	Total
DIRECT Sub-contractor's TOTALS							R O	Total (Rental)		Total (Owned)

ODOT

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: Ohio Department of Transportation

Name of individual: Daniel Groh, P.E.

Title of individual: Design Build Coordinator

Address: 1980 West Broad Street, Columbus, Ohio 43223

Phone: (614) 387-1162

E mail: dan.groh@dot.state.oh.us

Date : January 30, 2002

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

Design Build is a tool used by the Ohio Department of Transportation (ODOT) as an additional method of selling construction contracts to meet the goal of a \$1.2 billion construction program.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

Walid Gemayel, P.E. (614) 466-3598

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

The ODOT Design Build Program started in 1995 with six pilot projects. The original six projects can be placed into three categories: bridge replacements, resurfacing and lane widening. In 1999, the ODOT Design Build program was expanded to \$250 million for a two year biennium. The project types also expanded into deck replacements, bridge painting, concrete pavement overlay, adding additional lanes of pavement, tower lighting, sign replacement and noise wall construction. Currently, the ODOT Design Build program is operating under temporary legislative authority of \$250 million for fiscal years 2002 – 2003. ODOT design build projects range from \$197,000 bridge replacement to \$45,000,000 lane addition and pavement replacement.

1.4 Why did the Agency initiate its design-build program?

The ODOT began using Design Build as an innovative program to utilize contractor innovation, to help facilitate the construction program and as a method to quickly replace a deteriorating road infrastructure.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

Legislation was required to start the ODOT Design Build program. Attached is Ohio Revised Code 5517.01.1 which details the requirements of the ODOT Design Build Program.

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

Reaction from contractors initially was mixed. Some smaller contractors and smaller design firms were afraid that they would be eliminated by the larger contractors and larger design firms. Most contractors were excited about the prospect of having input on the design of a project.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

The ODOT Design Build has been very successful. ODOT has realized a substantial time and cost savings from the Design Build program. ODOT has learned new innovative construction techniques that are currently being implemented into the traditional design bid build program.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

ODOT project selection criteria are as follows:

Projects where physical conditions demand an expedited schedule

Projects which do not require additional right of way or extensive utility relocation

Projects which have little or no impact on the environment

Projects for which the scope can be clearly defined and allow innovation

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

1.10 Do you plan to proceed with additional design-build projects? If not, why?
As stated in the Ohio Revised Code, ODOT is still in its "pilot" phase. ODOT will seek permanent ability to use the design build method of contracting for the next biennium.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

See attached sheet DBProg.xls

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

See attached sheet DB Prog.xls

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?
The goals of the ODOT Design Build Program are lower overall project cost, to shorten the time from project design to construction, to lower the number of change orders and to utilize contractor/designer innovation.

2.6 Did design-build help the Agency meet its goals? How?
ODOT has realized the goals stated in question 2.5. ODOT has realized a substantial time and cost savings from the Design Build program. ODOT has learned new innovative construction techniques that are currently being implemented into the traditional design bid build program.

2.7 Describe the process used to identify risks and minimize the impact of risks.
The ODOT is prescriptive in nature which will reduce the impact of risk to the contractor.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?
The design time in an average ODOT design build project has been reduced by about 50%. ODOT has compared design build projects to traditional design bid build projects to realize this savings.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.
The ODOT has realized a lower total project cost than the traditional Design Bid Build method.

2.10 How was the project funded?
The ODOT Design Build projects are funded in the manner as our traditional Design Build Build projects.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.
No, Since ODOT is operating under temporary Legislative Authority, Funding is not an issue.

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.
ODOT Design Build projects can be phased or segmented. If they are, then either the Scope of services will clearly define how the project is to be phased if need be or the contractor will determine the phasing.

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

The only stakeholders on ODOT Design Build projects are ODOT personnel. They are District Planning, District Production, District Construction personnel and Central Office Personnel.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

The ODOT uses pre-qualification as its procurement process. Contractors and design Firms must be pre-qualified before they are allowed to bid on ODOT projects.

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

N/A

3.3 How many firms were shortlisted? How many proposals were received?

N/A

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

N/A

3.5 If negotiations were part of the process, were they useful? Please explain.

N/A

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

N/A

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

N/A

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

N/A

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

See attached sheet timeline.doc

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

N/A

3.11 Were there any protests? If so, please describe the circumstances and results.

N/A

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

N/A

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

The ODOT is currently working on a two step process that would utilize best value bidding instead of low bid.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

ODOT has sold Design Build projects from 10% – 40% design complete.

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

The ODOT components of the procurement package are as follows: proposal package, Scope of Services, and Specifications

4.3 Did you use prescriptive or performance specifications? How were they developed?

The ODOT Scope of Services has prescriptive specifications. The specifications were developed by the specifications committees made up of ODOT personnel, contractors, and consultant designers.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

The proposal is part of the ODOT contract. The Scope of Services places limits on the contractor's ability to deviate from the identified configuration.

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

Currently, the ODOT does not escrow bid documents on the Design build projects.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

ODOT would like to escrow bid documents on the Design Build projects.

5. PROJECT MANAGEMENT

5.1 How was the project managed?

The ODOT manages the Design Build projects with the appropriate number of project engineers and project inspectors.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

The roles of the ODOT personnel do not change from Design Build to Design bid Build.

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

See attached sheet scopeform.doc

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

The ODOT currently does not perform QA/QC on its projects. ODOT personnel perform all inspection and testing of materials. The ODOT has not had any serious issues with design or construction quality. If that should occur, ODOT uses a Dispute Resolution and Administrative Claim Process to resolve any issues. See attached sheet 025.pdf

5.5 What conditions were required to be met before the start of construction?

The contractor must submit plans for approval by the District design manager prior to start of construction as outlined in the Scope of Services.

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

No, ODOT uses the Dispute Resolution and Administrative Claim Process to resolve any issues. See attached sheet 025.pdf

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

ODOT projects are bid Lump Sum divided into major items of work. See attached sheet dbitems.pdf.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

Payments are based on progress of work completed and milestone dates.

6.3 When was mobilization paid and how were mobilization amounts determined?

Mobilization is paid in the same manner for Design Build projects as Design Bid build projects. See attached sheet Spec624.doc

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

The ODOT will pay for materials that are delivered to the jobsite but not yet incorporated into the project.

6.5 Did you limit payment for equipment?

The ODOT will limit payment for equipment only in a change order/ Force Account issue.

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

The ODOT does not hold any retainage for the projects.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

No, the ODOT does not have an award fee/incentive program tied to contractor performance (excluding schedule).

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

The contractor does not have the right to substitute a letter of credit or securities for retainage.

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

The ODOT does not limit the total amount payable at any point in time.

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

A subcontractor may file a mechanics lien on an ODOT project. The ODOT will withhold payment to a contractor if a lien is filed on a project. The subcontractor must file the lien, paid invoices and any unpaid invoices to stop payment to the contractor.

6.11 What were the conditions to final payment?

The conditions to final payment are that the Scope of Services requirements are met, all project work is complete, and all project paperwork is complete.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

The ODOT fixes the completion date of the Design Build projects.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

The ODOT provides for incentive/decentive clauses, and liquidated damages. Damages are based on the road user costs during the life of the project.

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

See attached sheet scope manual.doc

7.4 Who owned the float?

See attached sheet scope manual.doc

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

See attached sheet scope manual.doc

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date: N/A

Proposal date: The ODOT selects the Design Build projects based on all ROW being acquired before the project is let.

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

The ODOT selects the Design Build projects based on all ROW being acquired before the project is let.

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

N/A

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

The ODOT will list all known utilities in the Scope of Services.

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

The ODOT will negotiate all master utility agreements prior to contract award.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

The ODOT identifies utilities as all overhead and underground utilities. Storm drains, street lights etc will be defined in the Scope of Services.

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

The ODOT likes to keep ROW issues totally clear of the contract.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

The ODOT will allow time extensions for force majeure. See attached sheet sec100.doc

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

The ODOT will not allow price increase for force majeure. See attached sheet sec100.doc

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

Typically, force majeure events do not occur during the course of ODOT project.

9.4 How were differing site conditions addressed?

Differing site conditions are addressed in section 108.06 A. see attached sheet sec100.doc

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

The ODOT uses a system called Third Party Billing to handle contaminated materials, contaminated groundwater, or hazardous substances. The contractor hires a prequalified firm to remove and dispose of the waste. ODOT will grant a time extension and pay the invoice amount plus 5% to the contractor.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

See answer to 9.5

9.7 What permits/approvals were obtained by the agency before the proposal due date?

The ODOT will obtain all EPA and Army Corps of Engineer permits prior to selling a Design Build project.

9.8 What permits/approvals were the contractor's responsibility to obtain?

ODOT requires that the contractor obtain all permits necessary to perform the work. (i.e. SWPPP)

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

The ODOT does not give the contractor given responsibility for environmental mitigation measures.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

ODOT process change orders as extra work. They are based on agreed unit prices.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

See attached sheet 025.pdf

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

The ODOT has the ability to direct performance of work on a time and materials basis. Markups are not set and are determined by construction policy and specification.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

Value Engineering is by design built into Design Build process thus it is not allowed. ODOT tries to select projects that have all right of way cleared before the sale date.

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

The ODOT does warranty items on the Design Build projects. The items are not warranted on every project and are clearly defined in the Scope of Services.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

The ODOT Design Build contract provide that the warranty is the exclusive remedy for defects.

11.3 Was a warranty bond required? If so, how was the amount determined?

The ODOT requires that the contractor provide warranty bonds. The amount of the bond is calculated by the replacement cost of the item.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

No, The ODOT has not considered requiring the contractor to perform warranty work or correct defects post-warranty

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

The ODOT discourages any maintenance prior to completion. ODOT specifications are for a maintenance free product.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

The ODOT Scope of Services does not include post-completion maintenance.

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

The ODOT requires that no more than 49% can be subcontracted.

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

The ODOT uses the standard DBE policy on all projects regardless of Design Build or Design Bid Build.

12.3 How were EEO requirements addressed?

EEO requirements are handled on Design build projects as they are on Design Bid Build Projects.

12.4 Describe your experience with capabilities and turnover of contractor key personnel. ODOT has not recognized a major turnover of contractor key personnel on Design Build Projects.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?
The ODOT does not provide insurance for the projects.

13.2 What insurance was provided by the contractor?
The ODOT requires the contractor and design firm to own insurance see attached sheet sec100.doc

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?
The ODOT requires 100% bonds.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.
The ODOT is responsible for cleanup of hazardous materials found on site.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.
The ODOT contract does include an overall cap on liability or limitation on consequential damages. See attached sheet sec100.doc

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

SCDOT

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **SCDOT**

Name of individual: Linda McDonald

Title of individual: Chief Counsel

Address: P.O.Box 191, Columbia, SC 29202

Phone: 803-737-1347

E mail: mcdonaldlc@dot.state.sc.us

Date : March 14, 2002

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

SCDOT uses design-build to let projects that have a fixed budget or to decrease the time for project delivery.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

Rocque Kneece 803-737-1127

Doug MacFarlane 803-737-1345

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

The SCDOT has used the design build method on several projects including the following:

Conway Bypass – \$436M - completed

Southern Connector - \$17.5M -completed

Carolina Bays Parkway - \$193M – in progress

S.C. 170 – \$80M – in progress

Cooper River Bridge - \$531M – in progress

1.4 Why did the Agency initiate its design-build program?

Because the design-build-bid process took longer to accomplish and costs could be decreased using design-build.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

No. SCDOT did not consider legislation specific to design-build procurement to be necessary given the broad general statutory authority to lay out and build highways (S.C. Code §57-3-110), the absence of any legislation prohibiting the use of design-build, and SCDOT's statutory exemption from the state's consolidated procurement code (S.C. Code §§ 11-35-10, et seq.) presumably in deference to federal highway procurement rules.

A number of recent statutes have recognized the need for SCDOT to use innovative techniques in financing and constructing highways that we believe support our view of the legislature's intent. A State Infrastructure Bank was established to assist in financing large projects that could not be built using traditional financing methods. (See S. C. Code Section 11-43-110, Supp. 2000.) Also, the Legislature enacted a statute enabling SCDOT to enter into partnerships with public or private entities for the purpose of financing road projects. (See S. C. Code Section 57-3-200, Supp. 2000.)

1.6 Did you face opposition to design-build from contractors, consultants or others?

What were their main concerns with design build? How did you deal with those concerns?

We received some opposition from smaller companies fearing they would be cut out of work, that design build would require larger contracts that would go to the larger companies. We dealt with these concerns by pointing out that smaller companies could join with larger companies in consortia or partnerships to bid on design build projects.

Ned Sloan, a taxpayer, filed a lawsuit against SCDOT challenging its authority to procure construction contracts through a design-build method. His argument is because the design-build contracts include

construction services, the contracts must be procured through competitive bidding as prescribed by S.C. Code 57-5-1620. The SCDOT prevailed at the trial court level. The case is now on appeal to the S.C. Court of Appeals.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

We believe the program has met its goals of getting projects built on time and within budget. The benefits have been in getting the projects built with the money available and quicker that they otherwise could have been built.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

See answer to 1.1 above.

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

We are attaching copies of the procurement documents and contracts for the Carolina Bays Parkway project. I am not aware of any documents analyzing or reporting on the results of the projects.

1.10 Do you plan to proceed with additional design-build projects? If not, why?

Yes. We are proceeding with Carolina Bays Parkway, Phase II, by design-build method.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

2.6 Did design-build help the Agency meet its goals? How?

2.7 Describe the process used to identify risks and minimize the impact of risks.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

2.10 How was the project funded?

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

3.3 How many firms were shortlisted? How many proposals were received?

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

3.5 If negotiations were part of the process, were they useful? Please explain.

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

3.11 Were there any protests? If so, please describe the circumstances and results.

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

4.3 Did you use prescriptive or performance specifications? How were they developed?

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

5. PROJECT MANAGEMENT

5.1 How was the project managed?

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

5.5 What conditions were required to be met before the start of construction?

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

6.3 When was mobilization paid and how were mobilization amounts determined?

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

6.5 Did you limit payment for equipment?

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

6.11 What were the conditions to final payment?

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

7.4 Who owned the float?

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date:

Proposal date:

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

Yes, time extensions were allowed where the event caused a delay in the critical path. No exclusions were included.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

No price increase was allowed. The reasoning was that in a force majeure event, neither party was at fault. The contractor would be given additional time if it affected its critical path. The contractor could insure for the cost increases.

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

None to date.

9.4 How were differing site conditions addressed?

See contract provisions, Cooper River Bridge project.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

See contract provisions, Cooper River Bridge project.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

9.7 What permits/approvals were obtained by the agency before the proposal due date?

9.8 What permits/approvals were the contractor's responsibility to obtain?

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.
See contract provisions, Cooper River Bridge contract.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.
See contract provisions, Cooper River Bridge contract.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.
See contract provisions, Cooper River Bridge project.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?
No.

11.3 Was a warranty bond required? If so, how was the amount determined?
Performance and Payment Bond was required. Contractor said it was not commercially available for warranty provisions beyond 5 years. We are negotiating regarding bonding on remaining 5 and 10 year warranty periods. One of the big issues is how the amount of the bond will be determined. This has yet to be decided.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.
Not considered.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?
Contractor has all maintenance obligations until contract is completed. At time of final completion and acceptance, obligation for maintenance shifts to SCDOT.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?
Scope did not include post-completion maintenance.

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

12. SUBCONTRACTORS/DBE/EEQ/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

No changes. See contract provisions, Cooper River Bridge project.

12.3 How were EEO requirements addressed?
See contract provisions, Cooper River Bridge project.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?
None. Contractor provided all insurance.

13.2 What insurance was provided by the contractor?
See contract provisions, Cooper River Bridge project.

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?
We required 100% Performance and Payment Bonds because that is what is required under our statutes. (See S. C. Code Sections 57-5-1160 and 29-6-250, Supp., 2000.) We have no statutory provisions covering warranty bonds.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.
Contractor was not responsible if Contractor did not create the hazard. See contract provisions, Cooper River Bridge project.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.
No.

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Orange County Transportation Corridor Agencies

DESIGN BUILD INDUSTRY PRACTICE SURVEY
Orange County Transportation Corridor Agencies

Agency: San Joaquin Hills Transportation Corridor Agency
Foothill/Eastern Transportation Corridor Agency

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Date : 12/20/2001

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

The San Joaquin Hills Transportation Corridor Agency and Foothill/Eastern Transportation Corridor Agency (TCA or Agency) are joint powers agencies formed by the County of Orange and various cities within the County of Orange to develop the first modern toll roads authorized in California, totaling more than 68 miles of transportation facilities at an estimated cost exceeding \$3B. Since 1991, design-build has been the primary delivery methodology for the TCA, and has been used for two large projects which have already been completed and one project currently under construction. The TCA has also entered into a design-build contract for another large project, but that project has been delayed pending completion of environmental review.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

See above.

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

- *\$800M new highway (San Joaquin Hills toll road—an extension of Route 73) consisting of a six-lane, divided, limited-access highway of approximately 15 miles with related structures, equipment and systems. (Opened to traffic in 1996.)*
- *\$776M new highway (portions of the Foothill and Eastern Transportation Corridors--SR 231, SR 241 and SR 261) consisting of a four- and six-lane, divided limited-access highway of approximately 28.5 miles with related structures, equipment, and systems. (Opened to traffic in 1999.)*
- *\$600M new highway (Foothill-South toll road—a 16-mile project connecting the Rancho Santa Margarita area with Interstate 5 in San Clemente through the inland foothills of South Orange County, California, with an initial configuration including two lanes in each direction, with a median set aside for one or two additional general purpose lanes in each direction, HOV lanes, and/ or future transit options). It is likely that the TCA will procure a new design-build contract for this project due to the changes in alignment resulting from the environmental process. The Agency's existing design-build contractor has completed the work to be performed during the preliminary design phase, and work is suspended pending completion of the environmental review process.*
- *\$7.3M Glenwood Pacific interchange (addition of a southbound, braided off-ramp and an interim, northbound loop on-ramp, and other ancillary improvements such as retaining*

walls, signalization, electrical and lighting, drainage, landscape, and irrigation).
(Currently under construction.)

1.4 Why did the Agency initiate its design-build program?

Toll revenues are the primary source of financing for the projects, supplemented by impact fees assessed under the Subdivision Map Act. Those future revenues could be used as the basis for a bond financing only when the finance markets reached a level of comfort regarding the TCA's ability to complete the project. In general, this would require the TCA to enter into a single construction contract or design-build contract for each project, before it could obtain financing. Although the TCA had sufficient funds to complete 100% design for an initial segment of the Foothill Toll Road, and developed that segment on a design-bid-build basis, it did not have sufficient funds to complete 100% design of all of the projects. In 1990 the TCA's Board approved development of the remaining projects using design-build,

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

TCA did not obtain special legislation enabling use of design-build. It was created through a joint powers agreement, and derives certain independent powers under its enabling legislation (Government Code § 66484.3(f)) as well as having the right to exercise powers delegated by its member agencies. The courts have held that TCA is not subject to specific contracting procedures (such as competitive bidding) in entering into construction contracts using its independent powers, because its enabling legislation did not include any such restrictions. This has given TCA flexibility to use a best value selection process, and to negotiate design-build contracts, without requiring special legislation.

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

Contractors were concerned that work might not be spread around. In practice, the prime contractors for the large projects have found it in their best interest to spread the work around, because local contractors are better connected with local markets and can obtain good prices, etc. The design work has also been spread around—for the San Joaquin project, the prime design sub-consultant subbed work out to six or seven design firms.

Caltrans, which owns the roads and is responsible for maintaining them under TCA's enabling legislation, was also concerned about use of design-build, primarily relating to issues associated with project quality. The contract documents incorporate a number of provisions to address these concerns. First, the project was required to be designed and built to Caltrans specifications, and the Contract Documents included the Caltrans Standard Specifications, modified to address conflicts with the concept of design-build. Design submittals required Caltrans approval. Caltrans also had the right to inspect construction, and the entire project was reviewed by the Caltrans Safety Committee prior to acceptance by the TCA, opening to traffic and transfer of title to Caltrans.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

Absolutely—benefits of design-build include expedited delivery plus cost certainty through transfer of risk and responsibility. For the San Joaquin project, a major landslide would probably have cost the Agency in excess of \$10M had the contract included a standard differing site conditions clause. (The slide occurred after the slope was built but before the project was accepted. 3M yards of material had to be moved to fix the problem.) A smaller slide occurred on the Eastern project—again without any change order.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

The primary criterion is a need for speedy project delivery. For the most part this need is interconnected with financing. Measuring the time from receipt of approvals to opening the project to traffic, design-build is the most expeditious process. See also above discussion regarding inability to finance design work for the TCA's initial design-build projects.

For the Glenwood project, the decision to use design-build was driven by dollars—the project is financed with Title 23 funds, but couldn't be designed within the budget. The TCA asked

design-build contractors for innovative solutions.

The TCA is also proceeding with improvement programs using a conventional design-bid-build methodology. These projects are not urgent and TCA has sufficient funds to pay for the work required.

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

Nancy Smith will provide the procurement and contract documents to you.

We did not establish formal evaluation procedures. The first two projects were essentially procured on a low bid basis. The second two were awarded based on a best value determination as described in the requests for proposals.

For the San Joaquin project, the Agency issued a final report under SEP-14. Copies can be obtained by contacting James Brown, Director of Environmental Planning, Design and Construction.

1.10 Do you plan to proceed with additional design-build projects? If not, why?

We still expect to proceed with the Foothill-South project using design-build.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

San Joaquin: joint venture of Kiewit Pacific and Granite Construction, design by DeLeuw Cather (now Parsons Transportation Group) [Initial project complete]

Eastern: joint venture of FCI Constructors, Wayss & Freytag AG, Sukut Construction, Inc., and Obayashi Corporation, design by CH2M Hill et al. [Initial project complete]

Foothill-South: joint venture of FCI Constructors, Wayss & Freytag AG, Sukut Construction, Inc., and Fluor Daniel, Inc., design by CH2M Hill et al [Preliminary design completed. Final design and construction is pending environmental approvals.]

Glenwood: Granite Construction Co., design by Dokken Engineering

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

San Joaquin—Initial \$778.0M, Final \$795.2M Increase of 2.2% due primarily to changed conditions.

ETC—scope changes—Initial \$712.6M, Final \$776.9M Increase of 9.0% due primarily to scope changes (8%) secondarily due to changed conditions (1%).

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

The primary goals were to obtain completion on or ahead of schedule, without cost overruns. Because the projects were new highways, traffic impacts were relatively small. TCA also set up the contract documents to permit adjustments to be made in the right-of-way boundaries during the design process, so as to allow the design-builder flexibility in determining the optimum design, in coordination with adjacent development.

2.6 Did design-build help the Agency meet its goals? How?

Yes—the projects could not have been financed and built conventionally.

2.7 Describe the process used to identify risks and minimize the impact of risks.

During the process of developing the procurement documents, staff identified risks and decided how to address them, with input from financial consultants. Once the documents were issued, industry comments resulted in some shifting of risks back to the owner.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?

TCA analyzed schedule growth for various D/B and D/B/B projects which showed a significant time savings by utilizing D/B. Studies to compare the overall time requirements of D/B vs. D/B/B are limited. The only significant study of this nature that we are aware of was

performed by the Florida DOT in 1994. That study showed that D/B realized a savings of 59% for design and 18% for construction work.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

For San Joaquin, the design-build price included a significant risk component and was probably somewhat higher than the cost to design and construct using traditional delivery methods, but the project would not have been financeable using traditional delivery methods. Also, the accelerated delivery resulted in a reduction in interest payable by the Agency (since revenue service started earlier, toll revenues were available to start paying the debt earlier). We have not analyzed how much additional interest would have been required had a traditional delivery methodology been used.

For the Eastern toll road, the price obtained was probably lower than the cost to design and build conventionally. (The contractor left \$114 million on the table.) In addition, the project budget benefited from reduced interest expense due to accelerated delivery.

2.10 How was the project funded?

The major projects were financed with toll revenue bonds.

Glenwood was financed with 20% matching, 80% federal grant.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.

The contracts for the San Joaquin and Eastern toll roads included a limited notice to proceed (NTP1) allowing the contractor to begin design prior to financing. For Eastern, NTP1 also included limited construction work. For both projects, the agency negotiated an agreement with the contractor following award, requiring the contractor to perform certain additional work during the NTP1 period and allowing the agency to defer payment for that work until the construction financing closed.

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

Portions of the San Joaquin project were deferred in order to reduce the initial project cost (the Glenwood Pacific interchange was part of the deferred work). There are future plans to build out the project as funds become available.

The Eastern project included multiple segments, including one that was added by exercise of an option following award. Again, there are plans for build out of the ultimate project.

For all projects, the initial project was required to be compatible with the future build out, and included full width grading and construction of drainage facilities usable for the ultimate project. For the Eastern and Foothill-South projects the contractor's scope included preliminary design of the ultimate project to ensure compatibility.

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

Stakeholders include:

- *The TCA's member agencies--which are represented on the Board, and participate in monthly meetings of the Technical Advisory Committee. In addition, the contractor was obligated to obtain permits from the member agencies for certain work, and obtained appropriate design approvals from each within their jurisdiction.*
- *Bondholders—prior to sale of bonds the underwriter conducted due diligence and developed an Official Statement describing the project and disclosing risks and other areas of concern. Bondholders received regular progress reports regarding the status of the project.*
- *Caltrans—its needs were addressed through requiring compliance with their design standards and specifications, and offering them the opportunity to review and approve the project design and construction. The relationship between Caltrans and TCA is documented through Cooperative Agreements for the different projects. Caltrans representatives have offices in the same building as TCA, and TCA meets with Caltrans frequently, almost daily.*

- SCAG (Southern California Association of Governments)—TCA entered into a memorandum of understanding with SCAG and meets with SCAG representatives periodically.
- Orange County Transportation Authority—TCA obtained funding for portions of certain projects through OCTA, and entered into Cooperative Agreements with OCTA in connection with such projects.

TCA also dealt with numerous other entities, including the University of California at Irvine, utility companies, landowners, developers and environmental groups.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

San Joaquin: contractor pre-qualification, issuance of Invitation to Bids, one-on-one meetings with proposers, receipt of bids. Initial IFB issued in August 1990, bids received approximately 12 months later, award several months after that, financing 1-1/2 years later

Eastern: contractor pre-qualification, issuance of Invitation for Bids asking for suggested changes to Scope if price was above an upset amount, one-on-one meetings with proposers, receipt of bids. IFB issued March 1994, bid date September 1994, award October 1994, financing May 1995, full notice to proceed issued June 1995.

Foothill-South: contractor pre-qualification, issuance of Request for Proposals, one-on-one meetings with proposers, review of proposed optional technical concepts, receipt of proposals, best value analysis. RFQ issued June 1996, RFP issued December 1996, Technical Concepts due July 1997, proposals due November 1997, award May 1998.

Glenwood: RFQ issued January 2000, RFP issued February 2000, proposals due April 2000, request for BAFOs issued June 2000, one week allowed for submission of BAFO, awarded December 2000.

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

The industry review was necessary in order to retain bidder interest in the projects. For the San Joaquin project, the initial approach taken in the contract was to shift virtually all risk to the contractors. When it became apparent that industry was not willing to accept that much risk, TCA conducted one-on-one meetings with the proposers, and modified the contract documents to retain greater risk. These meetings also served to give the proposers comfort that the project would proceed—San Joaquin was the first start-up, revenue financed toll road to go to the markets. For the Eastern and Foothill-South projects, the industry review process resulted in fewer changes to the documents, but was otherwise comparable to the San Joaquin process.

3.3 How many firms were shortlisted? How many proposals were received?

San Joaquin—3 teams pre-qualified, 2 bids

Eastern—6 teams pre-qualified, 3 bids

FTC-S—3 teams pre-qualified, 2 proposals

Glenwood: 13 firms pre-qualified, 1 proposal (lesson learned, shortlist fewer firms, try to get funds to pay stipends)

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

San Joaquin and Eastern—low present value

Foothill-South—best value calculation only if low price (after deducting amounts for pre-approved options) was less than 5% below the next highest bid. Best value calculated by dividing price by technical score (a number between 0.5 and 1.0). The price was determined based on broadly defined “units” since insufficient information was available to allow lump sum pricing.

Glenwood—award to full compliance proposal with best price, if no such proposal received, award based on fixed price/best proposal.

3.5 If negotiations were part of the process, were they useful? Please explain.

San Joaquin—The low bid was significantly higher than the budget. TCA and the contractor entered into discussions, pre-award, regarding the possibilities for bringing the contract within a financeable range. Following award, a contract amendment was negotiated along the lines discussed prior to award.

Foothill-South—negotiations would have been useful but FHWA did not allow the contract to be negotiated.

Granite—negotiations were a critical element in obtaining a contract. Only one proposal was received. It was over budget and included elements that were unacceptable to Caltrans. TCA entered into discussions with the sole proposer and obtained a best and final offer from them.

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

Glenwood—see above discussion. Contact David Lowe if you would like information regarding the differences between the initial proposal and BAFO.

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

San Joaquin and Eastern—no deviations from Caltrans standards allowed, TCA gave the contractors Agency Supplied Documents defining the preliminary design, they gave TCA a price, their design was not part of the evaluation

Glenwood—alternatives were allowed as options, to be provided only if the contractor could not propose the full scope within the budgeted amount

FTC-S—contractors had the ability to propose alternatives for pre-approval and to include them as options in their proposals. The RFP allowed TCA four weeks to review proposed concepts and advise the proposers whether the concepts were acceptable or unacceptable, and what conditions would have to be met in order for a concept to become acceptable.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

San Joaquin: promised to pay the low bid contractor \$300,000 if the Agency failed to award a contract.

Glenwood: promised to pay \$30,000 to the top three proposers if the Agency failed to award a contract.

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

San Joaquin and Eastern—design considerations were not included in the selection criteria and therefore the proposals did not require a significant amount of time to review.

FTC-S—the proposal review process took place over a lengthy period (several months) and involved many reviewers in diverse disciplines

Glenwood—the proposal review period was less than 2 weeks, with 4-5 technical reviewers

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

See 3.4

3.11 Were there any protests? If so, please describe the circumstances and results.

For FTC-S the high bidder protested that a best value evaluation should have occurred since its price was within 5% of the low price after taking options into account. TCA's contracts officer agreed with the proposer and the TCA proceeded with a technical evaluation of both proposals. Upon completion of the evaluation TCA determined that the proposal with the lower price was the proposal with the highest technical score. The high bidder did not file a subsequent protest.

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

San Joaquin—ROD was issued post award; TCA issued a change order for new mitigation requirements

ETC—ROD was issued one month after award, but did not result in any changes in scope

Glenwood—ROD issued several years previously

FTC-S—ROD not issued, and still hasn't been issued

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

If the Foothill-South contract is reprocured, TCA will probably award it on a low bid basis, and will want to have the contract in place prior to the ROD so as to enable the project to proceed quickly following issuance of the ROD.

TCA still believes there is merit to the process originally followed for Foothill-South. In our comments on FHWA's proposed design-build regulation, which would require NEPA approval to be obtained prior to issuance of procurement documents for a design-build contract, we stated the following:

Given the level of design that is required in connection with the NEPA process, the proposed rule, in essence, will require the use of a modified design-build method for many design-build projects. It requires that some level of design (generally 30-35%) be done by the contracting agency, and then evaluated according to the NEPA process. This limits the design-builder's flexibility with regard to project design, since it is bound by the assumptions made by the original designer that were the basis for the NEPA analysis. This may or may not be the most economical design for the project.

This process also may or may not result in the most environmentally sensitive design for the project. It requires the design-builder to mitigate for impacts resulting from the owner's preliminary design, even though the design-builder might have been able to produce a design that avoided the adverse impacts.

In its purest form, a design-build contract would involve determinations by the design-builder regarding the best vertical and horizontal alignment, cross-sections, etc., taking into account not only cost but environmental impacts in order to come up with the best solution to the transportation issue at hand. The design-builder could then be required under the contract to evaluate alternatives to the project as required by NEPA. The TCA sees no bias or objectivity issues with this method. The design-builder is not reviewing the NEPA document—it is merely a project proponent. The responsibility for NEPA review still rests with the regulatory agencies, public officials and citizens.

In addition, the design-builder can offer a better perspective regarding the entire project, including the details associated with the ultimate design as well as the costs associated with different choices. A design engineer, working without the benefit of such a perspective, could understand the environmental impacts of the project.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

San Joaquin, Eastern 35%

FTC-S 5%

Glenwood—35% (this is a rough estimate and is based on the fact that numerous changes needed to be made to the plans)

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

San Joaquin and Eastern: Invitation for Bids, Contract, Scope of Work, Agency Supplied Documents (some of which are considered contract documents or provide a basis for change orders, and others of which are reference documents)

Foothill-South: Request for Proposals, General Terms, Phase I Terms, Phase I Scope, Phase II and III Terms, Phase II and III Scope, documents produced by the Contractor during Phase I become contract documents for Phases II and III

Glenwood: Request for Proposals, signature document, special provisions modifying Caltrans Standard Specifications,

4.3 Did you use prescriptive or performance specifications? How were they developed?

The specifications consisted of the Caltrans Standard Specifications plus criteria in addition to those standards which would generally be considered prescriptive. There were some modifications to the Caltrans Standard Specifications to conform to design-build.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

For the projects awarded on a best value basis, the proposal was considered a contract document, except to the extent that it failed to comply with other contract requirements.

The San Joaquin, Eastern and Foothill-South contracts all contained a "Basic Configuration" concept, requiring TCA approval of any material changes in the Basic Configuration. For San Joaquin and Eastern the contract provides for a price adjustment if any material changes in Basic Configuration are determined to be necessary. The following definition is from the Eastern contract:

"Basic Configuration" shall mean the following elements defining the Project as set forth in the Project Definition Documents:

- (a) the mainline horizontal and mainline vertical alignments, (in general, the contractor was allowed to shift the horizontal alignment by less than 50 feet, and the vertical alignment by less than two feet without TCA approval; for Oso the contractor had full flexibility to modify the vertical alignment provided the project stayed within the Agency Provided Construction Limits.)*
- (b) the general size, general location and type (as defined by Caltrans Bridge Design Practice Manual No. 2) of bridges, (TCA approval required for changes of the surface area of bridge, measured from inside face of parapet to inside surface of parapet and from beginning of bridge to end of bridge, of more than 5%)*
- (c) the mainline and ramp Typical Roadway Sections set forth in Agency Supplied Document 22 as modified in order to incorporate the number of lanes identified in Agency Supplied Document 8,*
- (d) the general location of the toll plazas,*
- (e) the general location of interchanges and the type of interchanges, and*
- (f) the termini of the Project, as generally shown in the Project Definition Documents, at the existing Foothill Corridor (State Route 241), State Route 91, State Route 133/I-5 and Jamboree Road.*

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?

Yes on all three of the major projects. The documents were initially delivered to an escrow company and following award were kept in a locked file cabinet in a locked room in the Agency's offices. They were reviewed on multiple occasions for both the San Joaquin and Eastern contracts, for the purpose of determining whether certain items were included in the original bid and for the purpose of determining a reasonable price for added or deleted work.

For San Joaquin, on two occasions a review of the escrowed documents resulted in a determination that the contractor had provided for the work in question in bidding the job.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

We would want to include a basic configuration concept for any greenfield project for which alignment changes are possible.

We would want escrowed pricing documents

5. PROJECT MANAGEMENT

5.1 How was the project managed?

Responsibility for managing correspondence, document control, etc. is held by the firm retained as TCA's design manager initially, transferring to the construction engineering manager (CEM) once the design is virtually complete. A change order strategy team (comprised of TCA staff, representatives of the design and construction managers, and TCA's general counsel) met regularly over the course of each project, to ensure consistency in the decision-making process and forestall potential problems.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

Procurement: weekly meetings were held to determine contract and procurement terms, attended by staff, consultants, TCA general counsel, Caltrans representative. Design manager drafted technical provisions, with comments from staff, other consultants, Caltrans and attorneys. Attorneys drafted procurement document and contract terms, with comments from staff, consultants and Caltrans.

Design: lots of meetings, review of design submittals within specified time frames. For Foothill-South, Caltrans participated in over-the-shoulder reviews.

Construction: lots of meetings, construction QA oversight

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

35, 65, 95/100

Under California law, in order to preserve sovereign immunity for design defects, the design must have been approved by a public employee with discretion (or by the governing board of the agency)

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

Design—designer runs submittals through a quality control/quality assurance process. This worked fairly well unless the designer was subject to time pressure

Construction—contractor QA/QC with CEM providing 20% independent QA testing and oversight inspection. In a few cases CEM testing was used for acceptance where the contractor testing failed.

In general, the contractor was good at testing but not inspection. The number of inspectors on the job was a frequent topic of discussion. There were never enough people, and they were inevitably underqualified.

For future projects, TCA would have the contractor perform testing, but would change to owner agent inspection

If TCA had responsibility for maintenance of the project following completion, it would consider requiring the contractor to perform long-term maintenance, and to pay lane rental for repair/replacement work during the maintenance period.

5.5 What conditions were required to be met before the start of construction?

(From the Eastern contract)

6.2.1.1 The Second Notice to Proceed shall have been delivered.

6.2.1.2 Agency and Caltrans (as appropriate) shall have approved the CPM/Payment Schedule and the Quality Assurance and Control Plans.

6.2.1.3 Agency and Caltrans shall have approved all applicable Project Design Documents and Construction Documents relating to such portion of the Project.

6.2.1.4 All Governmental Approvals necessary for construction of the applicable portion of the Project shall have been obtained and all conditions of such Governmental Approvals which are a prerequisite to commencement of such construction shall have been performed.

6.2.1.5 All insurance policies and bonds required to be delivered to Agency hereunder prior to commencement of construction shall have been received and approved by Agency and the Financing Entities.

6.2.1.6 Agency or Contractor shall have obtained all necessary rights of access for such portion of the Project.

6.2.1.7 Contractor shall have performed all survey work and delivered all notices to landowners required by the Scope of Work to be delivered prior to commencement of construction on such portion of the Project.

6.2.2 Notwithstanding the requirement contained in Section 6.2.1.2 regarding approval of Design and Construction Documents, Contractor may start construction of certain elements of the Project prior to final design approval in accordance with and subject to the terms and conditions set forth in Sections 2.5 and 2.6 hereof and Section 410 of the Scope of Work. In the event Contractor performs any such construction without final design approval, Contractor shall be obligated at its own expense to correct any Work not conforming to the Project Design Documents.

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

For the three major projects, a Disputes Review Board was established with binding authority for disputes below a specified amount (\$1M for Eastern and San Joaquin; \$375k for FTC-S) , and with advisory authority for larger disputes. The DRB is required to resolve disputes strictly in accordance with the contract documents, and the chairman of the DRB must be an attorney or retired judge. Disputes over \$1M not resolved at the DRB level go to a rent-a-judge.

This process worked well. It was important to have an attorney as the chairman because most of the disputes involved interpretation of contract terms.

The Glenwood Pacific contract provides for arbitration of disputes involving \$500k or less. The arbitrator must be a lawyer or retired judge. Disputes over \$500k would go to court.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

In general, the Agency is satisfied with the process. Future projects will include over-the-shoulder design reviews, and they will change the QA/QC process as described above.

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

Fixed price contracts. No contingency pool. At one point the San Joaquin and Eastern contracts included allowances for differing site conditions, but in both cases the agency negotiated a buy-out with the contractor.

FTC-S included unit pricing with very broadly defined units. The contract provides for a lump sum price to be established upon conclusion of the preliminary design phase.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

Progress payments tied to CPM/Payment schedule. Some change orders paid on a time and materials basis, others paid based on a negotiated lump sum or unit prices. Hazardous materials remediation paid on a time and materials basis.

6.3 When was mobilization paid and how were mobilization amounts determined?

San Joaquin—\$10 million paid at start of construction following issuance of Second NTP

Eastern—\$10 million paid at start of construction following issuance of Second NTP

Foothill-South—paid at mobilization for construction, \$15,000,000

Amount was set by TCA in all cases

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

(From Foothill-South)

12.2.10.1 [requirement to deliver to site or hold in bonded storage]

12.3.10.2 [requirement to provide bills of sale and mark materials as Agency property]

12.2.10.3 Material included in an invoice but which is subsequently lost, damaged or unsatisfactory shall be deducted from succeeding invoices.

12.2.10.4 [amount payable limited to cost of materials less retainage]

6.5 Did you limit payment for equipment?

TCA did not pay directly for the costs of equipment. Payment for equipment was allocated to and paid for as part of the activities with which the equipment was associated.

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

10% retainage for first 50% of project. Statute requires retainage to be released 60 days after project is accepted, subject to withholding for outstanding issues. TCA is still holding some retainage from San Joaquin and Eastern projects, but hopes to be able to release it soon.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

Safety incentive tied to insurance premiums.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

Yes, in accordance with statutory requirements. No problems presented.

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

Maximum payment curve based on cash flow schedule provided by contractor in its bid. Contractor has the ability to accelerate work ahead of the curve and receive payment, if it pays the Agency's cost of funds.

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

Mechanics liens not allowed on public property, but contractors have stop notice rights. Agency can withhold payment if stop notices are filed, but contractor can bond around the stop notices. Invoices must include DBE information, documents relating to schedule and certification signed by contractor representative.

6.11 What were the conditions to final payment?

receipt of all deliverables, special tools, site cleanup, certification re liens etc., completion of punch list items, closeout of local agency permits

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Contract limits on mobilization and payment for equipment are the result of unnecessary early expenditures by the contractor for San Joaquin

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

Deadlines were set by the RFP and the schedule was developed by the contractor accordingly.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

San Joaquin and Eastern: incentive payments equal to 70% of net revenues during the early opening period. LDs for Eastern: \$17k/day for Segment 1, \$35k/day for Segment 2, \$144k/day for remainder of project, plus stipulated damages of \$20k/day for delay in

completion of entire project, \$10k for final acceptance, \$2,800/day for Oso Segment. San Joaquin amounts were in the same range.

For San Joaquin and Eastern, LDs/incentives were the key to project success—anything that would delay project they would do the work—for example, in one case the contractor decided to tear down and rebuild a 100 foot high column because of the time involved in getting TCA/Caltrans to accept it.

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

Preliminary schedule submitted with the proposal, separate schedule provided for NTP 1 work.

Cost loaded schedule for NTP 2 work to be provided within 30 days after NTP 2, with revised schedules provided every six months. Activities during first year of each schedule to have a duration of no more than 60 days, except for non-construction activities which were to have a duration of no more than 75 days unless otherwise approved by Agency. Activities scheduled to start on or after one year from the schedule data date may have a duration of up to 180 days. The price for each activity included a separately identified amount for risk and profit reasonably allocated to the activity in question and included a separately identified percentage for overhead and other indirect costs reasonably allocated to the activity in question unless Agency and Contractor agree on another method of allocation of costs. The identified percentage for overhead and other indirect costs must be the same for all activities within each bid classification, and must not be changed without Agency's prior written approval, which may be withheld at Agency's sole discretion.

Agency may withhold payment if Contractor's schedule is unacceptable. That remedy was eventually exercised for San Joaquin and was effective.

7.4 Who owned the float?

Contract includes a float "banking" concept that was never really used. Concept was incorporated at request of contractors. From agency's standpoint, it is better for the project to own the float.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

Yes. Triggered if the Work is lagging any Critical Path for a period which exceeds the greater of (a) ten days in the aggregate or (b) that number of days in the aggregate equal to 2% of the days remaining until any Guaranteed Completion Date. For San Joaquin the contractor was required to produce a recovery schedule related to an injunction against the project.

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Float would be owned by the project instead of by the parties.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

For San Joaquin the agency owned some of the right-of-way as of the RFP/proposal date, and acquired a significant portion of the right-of-way after the construction financing closed. Additional parcels were obtained over the course of the project. For Eastern the Agency owned 98% of the right of way at NTP2.

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

SJHTC – 75 parcels; ETC – 6 parcels

The contractor produced binders that were the basis for determinations of necessity by the Agency's Board. The binders include legal descriptions, title reports, haz mat clearance, appraisals, relocation plans, and appraisal maps. The contractor was also required to pay for expert witness services for condemnation actions.

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

The RFP did not permit proposers to identify additional property, but they had the ability to request additional acquisitions through value engineering.

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

The design manager produced a utility survey, primarily through discussions with utility companies. Some title reviews were undertaken prior to issuance of the procurement documents for the purpose of making preliminary determinations regarding prior rights.

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

The Agency had some master agreements in place prior to award. A change order would have been issued to the extent that subsequent agreements resulted in a change in the contractor's work.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

"Utility" or "utility" shall mean a public, private, cooperative, municipal and/or government line, facility or system used for the carriage, transmission and/or distribution of cable television, electric power, telephone, telegraph, water, gas, oil, petroleum products, steam, chemicals, sewage, storm water not connected with the highway drainage and similar substances. The term "Utility" specifically excludes (a) storm water lines connected with the highway drainage, (b) Irrigation Facilities, and (c) traffic signals, street lights, and electrical systems for roadways, including those described in Section 86 of the Caltrans Standard Specifications ("Signals, Lights and Electrical Systems").

Storm drains, traffic signals, street lights, and electrical systems for roadways are part of the Contractor's scope and are not considered to be utilities.

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

The process as defined worked very well.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

Time extensions were allowed only for defined "Force Majeure" events. This is due to the fact that the project was financed by toll revenues.

"Force Majeure" shall mean any of the following events (provided such events are beyond the control of Contractor and are not due to an act or omission of Contractor) which materially and adversely affects Contractor's obligations hereunder, to the extent that the event (or the effects of which event) could not have been avoided by due diligence and use of reasonable efforts by Contractor:

(a) *[major earthquakes];*

(b) *Any epidemic, blockade, rebellion, war, riot or act of sabotage, or any acts of environmental activists in the nature of civil commotion or sabotage at or near the Site intended to delay construction of the Project;*

(c) *[The discovery at, near or on the Site of archaeological, paleontological or cultural resources];*

(d) *[The discovery at, near or on the Site of any species listed as threatened or endangered under the federal or state endangered species act; except to the extent that the Appendix 2 Approvals provide for mitigation]*

(e) *[suspension etc. of major environmental approvals provided by TCA];*

(f) *[change in law]*

(g) *[injunctions]*

The term “Force Majeure” shall be limited to the matters listed above and specifically excludes from its definition the following matters which might otherwise be considered force majeure:

[i] fire or other physical destruction or damage, including lightning, explosion, drought, rain, flood, earthquakes not within the parameters set forth in subsection (a) above, hurricane, storm or action of the elements or other acts of God;

[ii] except as provided in subsection (b) above, civil commotion, explosion, malicious or other acts intended to cause loss or damage or other similar occurrence;

[iii] strike, labor dispute, work slowdown, work stoppage, secondary boycott, walkout or other similar occurrence;

[iv] the presence at, near or on the Site of any archaeological, paleontological or cultural resource which was disclosed in the Agency Supplied Documents, was known to Contractor prior to the date of execution of the General Terms or would have become known to Contractor by undertaking reasonable investigation prior to the date of execution of the General Terms, and also including the risk of delays relating to archaeological, paleontological or cultural resources allocated to Contractor under Section 13.9.3 of the Phase II/III Terms;

[v] the presence at, near or on the Site of any Hazardous Substance which was disclosed in the Agency Supplied Documents, was known to Contractor prior to the date of execution of the General Terms or would have become known to Contractor by undertaking reasonable investigation prior to the date of execution of the General Terms, or which is contained in any building required to be demolished in whole or in part or relocated as part of the Work, and also including the risk of delays relating to Hazardous Substances allocated to Contractor under Section 13.9.3 of the Phase II/III Terms;

[vi] the discovery at, near or on the Site of any species listed as threatened or endangered under the federal or state endangered species act, to the extent that the Appendix 2 Approvals provide for mitigation measures to be undertaken with respect thereto (regardless of whether the species is listed as threatened or endangered as of the date of execution of the General Terms Date), and also subject to the risk allocation provisions Section 13.9.3 of the Phase II/III Terms (relating to delays arising from temporary no-work restrictions relating to such discovery);

[vii] the suspension, termination, interruption, denial or failure to obtain or nonrenewal of any permit, license, consent, authorization or approval (including all Governmental Approvals other than the Appendix 2 Approvals to the extent that Agency has agreed to be responsible for them) which is necessary for the performance of the Work or the operation or maintenance of the Project, except for any such matter resulting from a lawsuit as described in subsection (f) above;

[viii] any change in a Governmental Rule (such as increases in tax rates) which causes an increase in amounts payable by Contractor for deliverables but which does not change the obligations to be performed by Contractor hereunder, and any change in, or adoption of any new Member Agency Standards; and

[ix] all other matters not caused by Agency or beyond the control of Agency and not listed in subsections (a) through (g) above.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

A price increase was allowed for changes in the Work resulting from defined Force Majeure events. No price increase was allowed for increases in the Contractor's costs absent a change in scope. This was intended to parallel traditional contracts, for which agencies would implement design changes triggered by a force majeure event through a change order, but would not be required to pay for additional costs resulting from other types of force majeure events. For insured events the contractor is entitled to insurance proceeds but not a change order.

For San Joaquin, delay damages were allowed in connection with the injunction. Eastern and Foothill South did not allow delay damages for Force Majeure events.

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

San Joaquin—fire, flood, earthquakes, slides, environmental injunction. The contractor received insurance proceeds from insured events, and paid the deductible since none of the insured events constituted “Force Majeure.” The contractor received a price increase for its costs attributable to the injunction (the initial quote was significantly higher than the final amount).

Eastern—2 fires, 3 floods, slides—the contractor received insurance proceeds.

9.4 How were differing site conditions addressed?

The initial Eastern and San Joaquin documents provided an allowance for differing site conditions, including a very narrow definition of the term. The contractor assumed responsibility as part of the negotiations prior to financing.

For Foothill-South the initial contract placed responsibility for differing site conditions on the contractor, since the site conditions were to be determined by the contractor during Phase I of the project.

For Glenwood the contract incorporates a standard differing site conditions clause.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

Clean-up of identified materials was included in the lump sum price. Other clean-up was payable on a time and materials basis. The contractor was allowed a time extension only for sites requiring more than four months to clean up (and then only if the critical path was impacted).

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

Some hazardous materials were encountered for San Joaquin. A third party paid for clean-up.

For Eastern there was unforeseen lead contamination, leaking fuel tanks, contaminated groundwater. In some cases third parties handled the clean-up. The nitrate-contaminated groundwater which was identified in the procurement documents resulted in a dispute that was recently settled.

9.7 What permits/approvals were obtained by the agency before the proposal due date?

The Agency retained responsibility for major environmental approvals. A number were not obtained until after award.

9.8 What permits/approvals were the contractor’s responsibility to obtain?

Everything not on the list of Agency-provided approvals

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

The contractor was responsible for mitigation including replacement wetlands and the like. The Agency’s CEM provided biologists, etc. to monitor the site and to keep contractor personnel from violating mitigation requirements. There were some issues during construction, including breaches into restricted areas, floods caused some problems, one city claimed the construction created downstream problems, order from Water Board regarding nitrates.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

The Agency considered an incentive program for environmental compliance, also liquidated damages. The later contracts specifically allowed the CEM to stop work for cause for environmental non-compliance.

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

Request for quotation, negotiation, issuance of change order. In many cases the amount of the change order could not be determined until completion of design work.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

Contractor required to submit notice of potential change order followed by a request for change order. If contractor was unable to provide a complete change order, it was obligated to submit an incomplete change order and update it monthly. We agreed to an alternative process allowing change orders to be tracked on a matrix that was provided by the contractor each month identifying the status of each item.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

San Joaquin did not include pre-set markups, resulting in lengthy negotiations. The other contracts included pre-set markups.

Glenwood: markup for construction work in accordance with Standard Specifications, markups for non-construction work as follows:

(1) The cost of labor for non-construction-related work (including design, surveying, utility coordination, permits, professional environmental services and similar aspects of the Work), whether provided by Contractor or a Subcontractor, will equal the sum of (A) actual wages (i.e., the base wage paid to the employee exclusive of fringe benefits), plus (B) a labor surcharge of 150% on such amount, which shall constitute full compensation for all state and federal payroll, unemployment and other taxes, workers' compensation, fringe benefits (including health insurance, retirement plans, vacation, sick leave and bonuses) and all other payments made to, or on behalf of, the workers, in excess of actual wages, as well as for overhead.

(2) A 10% profit markup will be added to the cost of labor for non-construction-related work computed as provided in paragraph (1) above. The 5% mark-up for subcontracted work specified in Section 9-1.03A shall not apply.

(5) A mark-up of 5% will be allowed on permit fees, constituting full compensation for all overhead costs and profit associated therewith. No mark-up shall be allowed on any direct costs not specifically listed as a category of cost for which mark-ups are allowed.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

VE cut 10s of millions of dollars out of our projects

The contractors for Eastern and San Joaquin projects agreed to produce value engineering proposals in a specified amount, as part of the pre-financing negotiations.

For Foothill-South, the expectation was that the contractor would implement its VE-type ideas during the initial phase, and that the agency would receive appropriate credit when the lump sum price was negotiated. During subsequent phases the contractor would receive only a nominal share of any VE savings.

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

None

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

One year general warranty

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

Upon expiration of the warranty the contractor was relieved from liability for patent defects. Liability for latent defects continued for the full statute of repose (10 years in California).

11.3 Was a warranty bond required? If so, how was the amount determined?

Contractor has the right to replace the performance bond with a smaller bond at completion, 10% of original bond amount. The bonds were not replaced.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

The contractors were called back many times to perform relatively minor warranty items. There have been some post-warranty issues which the contractors have resolved.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

Contractor was required to maintain the entire project including the impacted arterial highway until acceptance. In general, a permit issued to a contractor by a local agency places responsibility for maintenance in the affected area on the contractor.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

1 year plant establishment for landscaping—continuing progress payments for such work. This will be 3 years for new contracts due to change in Caltrans standard practice

5 years habitat maintenance—continuing progress payments for such work. However, for both projects the Agency ultimately decided to assume responsibility for this work, and received a credit change order.

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

For future contracts we would want to more specifically describe the required level of maintenance, and make it clear that liability transfers only when the permit is closed.

We would also want to provide a performance specification for hydroseeded areas.

12. SUBCONTRACTORS/DBE/EO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

San Joaquin 39%

Eastern 41%

The following chart, prepared in March 1999, shows statistics for the Eastern project as of that date, based on a projected total contract value of \$767.0 million, total subcontracts of \$301.2 million (excludes material contracts); and total material purchased of \$45 million (excludes material purchased by subcontractors).

	Less Than \$500K	Less Than \$1M	Less Than \$5M	Less Than \$10M	More Than \$10M	Total
Number of Subcontracts	43	60	80	90	5	95
Total Value of Subcontracts (millions)	\$6.4	\$18.5	\$66.3	\$125.9	\$175.3	\$301.2
Percentage of Contract	0.8%	2.4%	8.6%	16.4%	22.9%	39.26%

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

The policy was revised to allow subcontractors to be identified post-award. The contractors achieved the goals.

12.3 How were EEO requirements addressed?

Standard provisions were included in the contract.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.
There were issues with some key personnel. The Agency from time to time asked for individuals to be replaced. Also some good people left the project earlier than desirable.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Will probably include liquidated damages for untimely departure of key personnel

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?
see attached chart

13.2 What insurance was provided by the contractor?
see attached chart

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?
Bonds for the 3 major projects were in the amount of \$250M. This was based on a survey showing that \$250M was the maximum amount available in the marketplace, and an analysis determining that \$250M was sufficient. 100% bonds were required for Glenwood. Under a recent California law, 100% bonds will be required for future projects.

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.
Agency provided a CERCLA indemnity

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.
*Liability capped at \$100M for Eastern and San Joaquin; \$50M for Foothill-South. No limit on consequential damages.
 (Language from FTC-S)
 Contractor's cumulative liability to Agency for damages resulting from breach of this Contract during Phase II and Phase III shall be limited to the sum of (a) all those costs reasonably incurred by Agency or any party acting on Agency's behalf in completing or correcting the Phase II Work and/or Phase III Work or having the Phase II Work and/or Phase III Work completed or corrected by another Person and (b) the amount of \$50,000,000 (which amount shall specifically include any Damages paid pursuant to this Section 17). For purposes of this Section 17.3, costs and expenses [payable under dispute resolution provision] shall be considered costs of completing and correcting the Phase II Work and Phase III Work. This limitation of liability shall not apply to liabilities incurred by Contractor [under indemnity provisions].*

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
We have not conducted a formal analysis regarding the benefits of owner controlled insurance programs. It is our understanding that the insurance/bond market has changed drastically since September 11, so our past experience may not be particularly relevant in determining requirements for future projects.

Project	Builder's Risk	Delayed Opening	Commercial General Liability	Automobile Liability	Excess Liability	Environmental Liability	Worker's Comp/ Employer's Liability	Professional Liability	Railroad Protective	Comments
San Joaquin Hills Toll Road	\$100m flood/earth; \$200m other; deductible 5% of value for earth, \$250k other	\$200m; 45 day deductible	\$10m NTP1; \$50m NTP2	\$10m NTP1; \$50m NTP2			Statutory/ \$5m	\$5m NTP1; \$15m NTP2	as required by RR operator	
Eastern Toll Road (OCIP at NTP2)	limits not specified; deductible 5% of value for earth/flood NTE \$250k earth, \$100k flood, \$350k other	\$200m; 45 day deductible	\$10m NTP1; \$50m NTP2	\$10m NTP1; \$50m NTP2			Statutory /\$5m	\$5m NTP1; \$15m NTP2	as required by RR operator	Contractor to provide auto, RR, aircraft; OCIP has limited off-site coverage
Glenwood Pacific	\$5m; deductible 5% of value for earth, \$250k other	N/A	\$1m occ; \$2m agg	\$1m	\$5m		Statutory/ \$1m	\$5m	not required	

UDOT

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **UDOT [1]**
Name of individual: Todd Jensen
Title of individual: Deputy Project Director
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Date : 1/23/02

1. GENERAL INFORMATION

- 1.1 How is design-build used by your Agency?
Has been used on very large and very small projects that are time sensitive.
- 1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.
Byron Parker 951-1026 X 305
Dave Nazare 957-8506
- 1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?
1. I-15 corridor 17 mile long corridor – urban reconstruction 1.5 billion;
2. SR-6 slide remediation \$1 million 3-Legacy Parkway 14 mile long urban new construction \$ 5/ million. under construction.
- 1.4 Why did the Agency initiate its design-build program?
To address the ability of the department to produce time sensitive projects. In response to public demand to minimize time span of major projects.
- 1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.
Yes. Also admin. Rules were developed by UDOT.
- 1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?
Yes. Associated General Contractors and many legislators were opposed because it was an unproven approach in the highway industry AGC felt local contractors would be shut out of the work. Agency spent tremendous time educating all parties.
- 1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?
Yes – Projects have been completed as planned and advertised to the public resulting in an 80% + approval of UDOT performance by public.
- 1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?
Time; size and type of project; cost of project;
- 1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?
No analysis documents have been prepared on this project yet.
- 1.10 Do you plan to proceed with additional design-build projects? If not, why?
Yes.

2. PROJECT BACKGROUND

- 2.1 Identify your project(s) and design-build team member(s) for each project.
Legacy Parkway – Team members for UDOT . Byron Parker; Director Todd Jenson, Deputy Director; Rick Compag; Const. Qual. Mngr.; Michael Bloomquest, Design Manager; Constructor Fluor Daniel; Ames; Kraemer & Sons (FAK)
- 2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.
Legacy Parkway = \$451 Million. Final price unknown.
- 2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?
Minimize Disruption; Provide project delivery in timely manner; Minimize costs; Achieve high quality Highway Product.
- 2.6 Did design-build help the Agency meet its goals? How?
Yes. See 1.7
- 2.7 Describe the process used to identify risks and minimize the impact of risks.
Risk matrix was constructed by team to identify all risks. Assignments were made to minimize the risks.
- 2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?
Yes – The two completed projects were completed in approximately ½ the time traditional projects would have been completed.
- 2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.
Lower- efficiency of all operations under control of one entity – economies of scale. On the two completed projects there were no contract increases for the basic work included in the contract packages.
- 2.10 How was the project funded?
Totally state funded.
- 2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.
Yes – Required contractor to bid project to match cash flow estimates and availability of funding.
- 2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.
No – See 2.11.
- 2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.
Third party agreements were executed with – utility owners; cities; counties; and Federal agencies to protect their interests. Environmental groups were coordinated with and are engaged in the construction process. Municipal advisory group is also ongoing through construction.

3. PROCUREMENT PROCESS

- 3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?
Statement of interest (30 days); Prequalification (30 days); RFP (4 months); Preapproval of alternative technical concepts (3 months); Discussions (3 months) and then executed contract (3 weeks). Did not do BAFO negotiations.

- 3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.
Did not use industry review process. During RFP process contractors were allowed to submit suggestions and ask questions that resulted in some industry input.
- 3.3 How many firms were shortlisted? How many proposals were received?
3 shortlisted – 3 proposed on project.
- 3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).
Best value – used choosing by advantage. Selection process; 50% cost and 50% technical to determine best value.
- 3.5 If negotiations were part of the process, were they useful? Please explain.
N/A
- 3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.
N/A
- 3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.
Proposers could only deviate with specific approval from UDOT. Requests were submitted by proposers, reviewed and approved or dis-approved by UDOT team.
- 3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?
Yes. All responsive proposers were eligible to receive stipends. \$500,000 stipend to each unsuccessful proposer. I-15 stipend was \$950,000.
- 3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?
Technical terms were established for each technical area, i.e. Roadway design; structures; Geotechnical etc. All technical scoring was performed by these teams in a blinded environment. Financial teams reviewed financial information in a blinded environment. Results were combined by management teams and final scores delivered to UDOT Director who made final decision and awarded contract. 50+ reviewers were involved in this process.
- 3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)
*Assigned points to proposers who proposed advantages over and above base RFP requirements. Relative weights were assigned and applied.
Price = 50% Technical = 50%
Did use formula to determine*
- 3.11 Were there any protests? If so, please describe the circumstances and results.
No Protests.
- 3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?
ROD was required. RFP was issued in July 2000. FHWA ROD was issued in October 2000 and Army Corp. of Engr. Rod in Jan 2001. Incorporated final requirements through issuance of change order.

- 3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Would simplify selection process. Would ask proposers to identify how they would exceed RFP requirements and not dwell on how they would meet minimum RFP requirements.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

- 4.1 What level of design was completed prior to issuance of the procurement package?
 15%
- 4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).
See CD. Procurement package did include Instruction to proposers; Forms; general provisions; special conditions and technical provisions.
- 4.3 Did you use prescriptive or performance specifications? How were they developed?
Mixture – Many UDOT Standard specs were used but some performance specs were also developed.
- 4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?
Yes. Characterizing the proposal as a contract document did not create any issues. Used an annulated RFP process to identify all issues. See basic configuration change RFP for limitations on contractors ability to deviate from configuration.
- 4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?
Yes. Documents were placed in bank vault. Were not reviewed in detail – just made sure we had them and could review if necessary.
- 4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Simplify selection process.

5. PROJECT MANAGEMENT

- 5.1 How was the project managed?
Combination owner and contractor management teams co-housed at same locations.
- 5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?
Procurement – worked with consultant staff to develop RFP& associated tech requirements and risk analysis. Design and construction the agency is fulfilling an active oversight role. Conducting Quality check point reviews and all design approvals. This team is an integrated UDOT/consultant; in-house/outside lawyer team.
- 5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?
Oversight review – concept related and is informal review. Milestone design review at critical points during the design process – Formal review that verifies QC processes are in place and QA for all design process has been accomplished. Formal agency design approval is required before releasing to construction.
- 5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?
Contractor is responsible for all quality control. UDOT/independent quality firm is responsible for all design and QA activities. No major issues with design quality. Some quality issues

- with construction have occurred. Held Quality summit meeting with all UDOT/FAK personnel and determined how to solve the issues jointly.*
- 5.5 What conditions were required to be met before the start of construction?
Had to have quality management in place. Had to have approved designs and plans. ROW had to be acquired or right of entry had to be in place.
- 5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.
Yes, have a design-build resolution board consisting of 1 design-build contractor selected member; 1 UDOT selected member and 1 member selected jointly by the 1st two members.
- 5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
Simplify as much as possible.
- 6. PAYMENT**
- 6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?
Fixed price did not use allowances and do not have contingency pool.
- 6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?
Paid on a cost loaded schedule and progress on predetermined items. No price centers.
- 6.3 When was mobilization paid and how were mobilization amounts determined?
Total mobilization + \$15 million – NTP1 paid \$3 million; NTP2 paid \$12 million – NTP1 total const. Value + \$10 million – NTP2 was force minder of contract.
- 6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?
Paying for stockpiled materials – Require manufacturers cert. prior to payment.
- 6.5 Did you limit payment for equipment?
No.
- 6.6 Did you withhold retainage? What percentage? At what point was retainage released?
Yes 5% will be reduced to 2-1/2% 30 days after achieving substantial completion of project.
- 6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.
*Yes Incentives tied to measurable performance indicators.
No liquidated damages excluding schedule.*
- 6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?
No.
- 6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?
Yes – Maximum payment curve that fits project funding has been developed.
- 6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?
*Entitled to liens.
Agency has right to withhold payment if liens are filed.
Documentation of progress and cost loaded schedule is required.*

- 6.11 What were the conditions to final payment?
All final punch list items must be completed and no remaining claims or unresolved issues.
- 6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
No.

7. SCHEDULE

- 7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?
RFP fixed completion as X working days after issuance of NTPZ.
- 7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?
Yes. Early completion incentive. Amount determined by ranking importance of early completion and assigning a value. \$250,000 is max. incentive that can be earned.
- 7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?
Required cost loaded schedule be submitted with proposal. No other schedules are required.
- 7.4 Who owned the float?
Owner and contractor jointly own float.
- 7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?
Yes if project director determines progress is not satisfactory he can ask for new schedule. Have not required this to date.
- 7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

8. RIGHT OF WAY/UTILITIES

- 8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?
*RFP date: 25%
 Proposal date: 35%*
- 8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?
180 contractor helped prioritize acquisitions other than that played no role.
- 8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?
*Yes. If they deviated from project footprint.
No additional property was identified by proposers.*
- 8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?
Hired firm to locate all existing utilities. All risk on unidentified utilizes was assumed by UDOT. Proposers had to verify accuracy of misidentified utilities and assumed that risk.
- 8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?
Yes.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"
Storm drains, street lights, irrigation or other facilities are all included in the definition of utilities.

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
All utility agreements should be negotiated and signed if possible. Dedicate at least 1 person to utilities. Maximize the R/W acquisition prior to REP and contract.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

Yes. Must demonstrate that they caused a delay in critical path items. No exclusions.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

Yes if contractor could demonstrate that it modified the scope of work.

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

None to date.

9.4 How were differing site conditions addressed?

Risk assumed by Department and will issue change orders for differing site conditions.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

Change order will be issued.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

None to date.

9.7 What permits/approvals were obtained by the agency before the proposal due date?

404 permits were acquired by UDOT.

9.8 What permits/approvals were the contractor's responsibility to obtain?

All other required were contractors responsibility.

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

Yes no compliance problems to date.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

See Vol 2 section 13 of RFP document (CD)

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

See Vol 2 section 13 of RFP document (CD)

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

Yes. Markups were pre-set. Construction labor surcharge = 31% of burdened wages. 15% markup. Non const. Labor = actual 10% markup wages + surcharge of 140% materials = supported by valid quotes from vendor. 10% markup. Equipment = operating rate and

standby rate (see RFP for details.) Permit fee markup + 5%. 10% markup for other direct costs.

- 10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

Yes. Savings shared 50 – 50.

Row savings accrue to owner.

Have accepted some VE proposals.

- 10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

NA

11. WARRANTIES/MAINTENANCE

- 11.1 Did the contract include warranties? Describe the scope/term.

Yes. See REP section 10.2.

- 11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

Yes.

- 11.3 Was a warranty bond required? If so, how was the amount determined?

Yes. Unsure as to how amount was determined.

- 11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

No.

- 11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

Responsible to repair any damage prior to completion.

- 11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

No.

- 11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

- 12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

Unknown – contract requirement that no more than 50% of construction or design could be sublet.

- 12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

No DBE requirement – No Federal funding on this project.

- 12.3 How were EEO requirements addressed?

N/A on Federal funding.

- 12.4 Describe your experience with capabilities and turnover of contractor key personnel.

Have not experienced significant turnover to date.

- 12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

- 13.1** What insurance was provided by the Agency?
OCIP was used on this project.
- 13.2** What insurance was provided by the contractor?
Deductible coverage not provided by DCIP.
- 13.3** Did you require 100% bonds? If not, what amount was required and how was that amount justified?
No. 50% of the proposal amount (Perto bond)
Payment bond = \$170 million.
- 13.4** If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.
Yes. See RFP vol.2, section 18.
- 13.5** Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.
Yes.
- 13.6** Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
No.

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **Utah DOT [2]**
 Name of individual: Carlos Braceras
 Title of individual: Deputy Director
 Address: 4501 South 2700 West Box 141250, Salt Lake City, UT 84114
 Phone: 801-965-4030
 E mail: Cbraceras@dot.state.ut.us
 Date : 12/24/01

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

Projects are selected on a case-by-case basis

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

Byron Parker 801-951-1026 (Ext. 305)

Todd Jenson 801-951-1026 (Ext. 314)

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

I-15 reconstruction (\$1.56B) completed, US-6 Stotaligation (\$1m) complete, ATMS deployment (\$?) complete, Legacy Parkway (\$320m) underway.

1.4 Why did the Agency initiate its design-build program?

To be more responsive to our public.

More control over costs, Quicker project delivery, Best value selection.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

Yes.

1.6 Did you face opposition to design-build from contractors, consultants or others? What were their main concerns with design build? How did you deal with those concerns?

Yes, mostly with our contractors they felt that the big out-of-state contracts would get the work. Encouraged the DB's to utilize local contractors.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

Yes. We now have a high level of acceptance from the public they believe that we will do what we say we will do.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

We have no "set" criteria, it is evaluated on a project-by-project basis.

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

We have been evaluating the I-15 project under SEP-14 and the results are published on our web page - www.dot.utah.gov/res/tested/default.htm.

1.10 Do you plan to proceed with additional design-build projects? If not, why?

Yes.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

I-15 John Bourne US 6 Hugh Kirkon

Legacy Parkway – Byron Parker

Atms – Jason Davis

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

I-15; \$1.56B/ \$1.53B

US-6; \$1m/ \$1m.

ATMS ?

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?
Schedule/Budget/minimize traffic disruption.

2.6 Did design-build help the Agency meet its goals? How?
Yes. One firm responsible to control risks.

2.7 Describe the process used to identify risks and minimize the impact of risks.
Formal risk assessment where project team identified risks and allocated them to entity best able to manage them.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?
Yes. On I-15 our PM's figure it would take 8 years to design – bid – build and it took a little over 4 years with DB.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.
Probably about the same.

2.10 How was the project funded?
State and federal funds.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.
Yes federal \$ imposed some requirements. SEP-14 process, selection criteria.

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.
No.

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.
Public. Strong outreach program by both the Dept and the DB.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

RFQ to prequalify and short list.

RFI (request for Info) to ID interested field.

RSP process included Q & A discussions

The whole process was about 8 months.

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

Changed maint. requirements from 20 years to 5 with option to extend in 5 1-year increments.

3.3 How many firms were shortlisted? How many proposals were received?

3

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

Best value.

3.5 If negotiations were part of the process, were they useful? Please explain.

Discussions were used and they were very helpful.

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

The proposer had to prove that their proposal was equal or better. This was done in the discussion phase.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

Yes. The unsuccessful proposers who turned in a proposal that met the requirements (responsive). \$1m for I-15, \$300,000 for Legacy.

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

For Legacy 1 month. There was a technical & cost review teams. 50 people reviewed the technical, 3 the Cost. Scores were combined by Exec. Director.

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

Price 50% Legacy

Technical 50% Legacy

Adjectival scores for I-15

3.11 Were there any protests? If so, please describe the circumstances and results.

No.

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

RFP went out when FEIS was issued. ROD prior to contract award. Addendum process would be used if there were changes, but there weren't any.

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Prior determination of how much "extra" value we would pay for.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?
20%

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

Instructions to Proposers

Contract Documents

Reference Documents

4.3 Did you use prescriptive or performance specifications? How were they developed?
Performance specs for the design side, mostly prescription for const. dev. as part of RFP process.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

Yes. Required # of lanes and connections were required.

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?
Yes. Only used to help settle change orders if agreement couldn't be found.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Make it simpler for both UDOT and the proposers.

5. PROJECT MANAGEMENT

5.1 How was the project managed?
Full time Project teams.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?
Lead by UDOT. Project team w/help from Consultants and outside lawyers.

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?
Over the reviews. We had formal submittal, but I don't remember what they were.

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?
Good design quality control. Consultants understand the process. Construction took a little longer. Partnering was bit to resolving issues.
Independent assurance as a 3rd party helped.

5.5 What conditions were required to be met before the start of construction?
Approved Quality plan in place.
Approved Safety Plan in place.

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.
Through partnering a DRP was developed that solves problems at the lowest level.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

Lump sum. No.

Unit prices for hazmat remediation (I-15)

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

Resource loaded schedule.

6.3 When was mobilization paid and how were mobilization amounts determined?
I-15: Mobilization paid early. Limited to 10% of contract price by Contract.

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

Yes. Required a paid invoice (I-15)

6.5 Did you limit payment for equipment?
No separate payment for equipment.

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

5% retained. Partial release of 50% at substantial completion. Final at final acceptance.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

Incentive/award fee program.

I-15 Yes for schedule, quality, project mgmt.

No LDs except for schedule.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?
Yes.

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

Yes, based on available cash flow.

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

6.11 What were the conditions to final payment?
Final acceptance of all work.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

Yes.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

I-15: Yes. Part of incentive fee paid every 3 months throughout the project. Additional fee payable for early completion of project.

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

Schedule required in proposal. Baseline schedule required within 45 days of NTP with monthly updates.

7.4 Who owned the float?

Contractor.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

Yes. Falling behind specified %.

Never used provision.

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date: Legacy 5%

Proposal date: 10%

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

DB ID'ed priority order.

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

Yes/No.

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

Consultant hired to ID utilities. Lessened risk of unidentified utilities.

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

Yes. Draft agreements included in RFP if final agreement not executed before award. Late agreements incorporate by Change Order.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

Storm drains, water, sewer, gas, power lines, communications, ATMS.

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

Yes.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

Yes, *balance the risk against getting a good (low) bid.*

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

No.

9.4 How were differing site conditions addressed?

Identified specifically in contract – addressed in somewhat a standard way. Some items were specifically excluded.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

Sites were identified in RFP and unit prices bid as part of proposal.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

Yes. *Resolution negotiated with DB.*

9.7 What permits/approvals were obtained by the agency before the proposal due date? ROD, 404 by contract signing.

Draft Air Quality Approval Order.

9.8 What permits/approvals were the contractor's responsibility to obtain?

Material source.

Dust/air permits (Emission Control Plan)

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

Some/no incentives were tied to this area.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

Contractor requested to provide price quote.

Terms and prices negotiated.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

Contractor notifies owner of changed condition.

Owner determine merit. If change warranted, contractor quote requested. Terms and payment negotiated.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

Yes. *Mark-ups (%) were part of price proposal and incorporated into contract at award.*

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

Yes/50/50 ROW: *Cost included in net savings calculated.*

Yes

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

Some, don't really know details.

Standard one-year warranty.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

No. *Had optional long-term maintenance.*

11.3 Was a warranty bond required? If so, how was the amount determined?

N/A

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

N/A

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

Responsible for maintaining entire project (except snow removal on open lanes) upon NTP.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

Yes. *Option that state could exercise at any time up to 6 months before completion. Paid on annual basis based on price included in price proposal escalated from proposal date based on FHWA order.*

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

Good faith efforts required throughout project. Goal to be worked on throughout project, not just at proposal time.

12.3 How were EEO requirements addressed?

Included % for minority and women included in contract.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

Personnel very capable. Some turnover of QA personnel. Generally little turnover of key personnel.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

OCIP _____

13.2 What insurance was provided by the contractor?
Off-site workers comp and auto insurance. _____

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

No. Required \$250 million payment + performance for \$1.3 billion contract. Amount determined by amount reasonable available on bonding market. _____

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

Yes. _____

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

There was a cap. Amount around \$100 million. I think spelled out in contract. _____

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

UTA

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: **Utah Transit Authority**

Name of individual: Michael Allegra

Title of individual: Director of Transit Development

Address: 3600 South 700 West, P.O. Box 30810, Salt Lake City, Utah 84130

Phone: 801 262-5626 ext. 2133

E mail: mallegra@uta.cog.ut.us

Date : January 15, 2002

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

To design and construct light rail transit projects. It is applied to the projects where it will help to meet the project goals and objectives.

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

Steve Greene, Manager of Engineering and Construction, 801 466-4697

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

The University Light Rail line was recently completed using a design-build approach. The Medical Center Extension is in the design phase of a design-build program. At this time there are not any additional projects in the design-build pipeline. The U line was a \$118 million program and the MCE is a \$79 Million program

1.4 Why did the Agency initiate its design-build program?

The University Line project was an important project for the UTA to complete prior to the Olympic of 2002 in Salt Lake City. The number one project goal was to meet this short schedule. Design-Build appeared to be a delivery method that could reasonably assure that this goal could be met. In addition, a tight budget with a small contingency was established for the project. Again, design-build provided additional assurances to the UTA in meeting program cost goals.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

Yes. The details can be gleaned from Kathryn Pett, UTA Legal Counsel.

1.6 Did you face opposition to design-build from contractors, consultants or others?

What were their main concerns with design build? How did you deal with those concerns?

There was very little opposition to the use of design-build for the University Line and none to its use on the Medical Center extension.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

The goals of the University Line project were 1) complete the project in a very short period of time (prior to the beginning of the 2002 Winter Olympics), 2) program costs needed to remain below \$118 million, and 3) the quality of the project was to be at a level equal to the previous rail projects completed by UTA. All of these goals were met. The project is considered a great success as a result of meeting these goals and other objectives of the agency.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

Simply if it can be shown to increase the agency's chance to succeed in meeting project goals and objectives.

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

These are available by contacting Ted Zealley, Parsons Brinckerhoff, 801-652-1321.

1.10 Do you plan to proceed with additional design-build projects? If not, why?
None are presently in the process. However, UTA will continue to use the approach that improves their ability to meet project goals. In instances where design-build fits this requirement it will be used as the process to complete the project.

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.
*University Light Rail and Medical Center Extension – both used the same team members.
 Design/Builder - SLC Rail Constructors (Stacy Witbeck, Fltairon Structures, and Geneva Rock),
 Program Managers – Parsons Brinckerhoff, Construction Oversight - Carter Burgess*

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.
University Light Rail line Initial was \$79 million and the present contract amount slightly. The changes are primarily due to owner directed changes that are for incentive fees and betterment. The contract amount increased by approximately 2% due to contractor initiated changes.

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?
See 1.7 above

2.6 Did design-build help the Agency meet its goals? How?
See 1.7 above

2.7 Describe the process used to identify risks and minimize the impact of risks.
Initial partnering sessions identified risks and mitigation plans for them. Weekly review meetings with the contractors, owner, and stakeholders were held to look for the best solutions to continue the risk mitigation plans.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what were the timesavings and how was this determination made?
Yes. It is based on the assumption that the initial schedule for the project of 27 months was tight compared to the completion of the very successful design-bid-build rail line UTA had previously completed. This could be verified by the fact that one University Line proposer withdrew due to their concerns about meeting this 27-month schedule. The successful proposer completed the work on the University Line in 18 months. The major difference between the previous light rail project and the University Line project was in the contracting method. The University Line used design/build and the previous project design-bid-build.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.
It is the UTA's belief that the University Line was more expensive per mile than the previous rail project the UTA had recently completed. As a result, the perception is that design/build was more expensive on the University Line than if the project were to have been completed with a design-bid-build approach. The University LRT project had more stringent maintenance of traffic and access requirements and significantly more public/community relations work included and was working on a tighter completion schedule to finish before the Winter Olympics – all of which drove the cost up.

2.10 How was the project funded?
The University Line was funded by both local and federal funds through a FTA Full Funding Grant.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.
Very little other than the need to change local statutes to allow the process to occur.

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

It was not phased.

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

There were three major stakeholders: The City of Salt Lake, The University of Utah, and The Utah Department of Transportation. Prior to the selection of a contractor, the stakeholders were brought on board to help develop the contract philosophy, and to develop a Interlocal Agreement that spelled out the terms of the working relationships between the owner and stakeholders and their requirements for the project. Once the design/builder was procured, each of the major stakeholders was co-housed with the owner and contractor and met on issues daily to move them to completion in a coordinated fashion.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

Prequalification and shortlisting (2 months), Draft RFP and Industry Review (2 months), Addenda and adjustment in scope (6 months), Submission and Evaluation of Proposals (1 month), Discussions (3 days), BAFO (3 weeks), BAFO evaluations & selection (1 week) and negotiations (2 months).

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

Yes. Adjustments were made to schedule, evaluation and scoring of proposals, and technical criteria.

3.3 How many firms were shortlisted? How many proposals were received?

Four were shortlisted and two proposals were received.

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

SOQs were rated on a descriptive (adjectival) method. Final selection was best value with a descriptive (adjectival) quality rating process that was converted to a multiplier factor that balanced cost and quality.

3.5 If negotiations were part of the process, were they useful? Please explain.

Negotiations were used to lower the price by approximately 20% from that submitted.

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

A BAFO process was used to drive the cost of the project down and to incorporate changes imposed on the project after initial proposals were received.

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

No.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

Yes, the unsuccessful proposers received a stipend if they submitted a responsive proposal. Amount = \$300,000. (Note: Amount set based on a projected contract for 12 miles of LRT line with cost of \$300,000,000. After initial RFP and after substantial work on proposals by short-listed firms, the scope of the project had to be significantly reduced due to lack of funding. Since proposers had already expended significant effort, agency thought it only fair to keep stipend at original level.)

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

Sections were reviewed by evaluation teams who prepared a preliminary quality evaluation. Oral interviews were conducted with proposers and the evaluation teams prepared their final quality recommendations. Team recommendations were presented to a selection committee who developed an overall quality rating. Concurrent with quality evaluations, a price evaluation team evaluated the price proposals. Prices were revealed to the selection committee after quality ratings were determined. The selection committee prepared a selection recommendation based on best value and presented the recommendation to the selection official (UTA General Manager) who made the final selection determination.

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

Price and technical (management and technical solutions) factors received equal weight. The overall descriptive quality ratings (Exceptional-Good-Acceptable-Unacceptable) were converted to a multiplier (range of 0.85 to 1.05, with "Exceptional +" = 0.85 and "Acceptable -" = 1.05). Prices were multiplied by the quality factor to determine the selected proposer. The proposer with the lowest adjusted price (quality factor X price) was selected. No options were considered. Schedule was a subfactor under the "Management" factor. It was a fixed price proposal.

3.11 Were there any protests? If so, please describe the circumstances and results.

A protest was received from a short-listed firm that did not submit a proposal. That firm did not believe the project could be completed within the time schedule allowed. The proposal was addressed according to UTA written protest procedures and was denied.

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

The initial RFP was issued in May 1999. The ROD was issued after issuance of the RFP but prior to issuing the final addendum and before the Proposal Due Date.

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Particularly liked the Incentive Fee program. It was very helpful in meeting the project goals from a public outreach perspective.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

Approximately 30%.

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

For detailed information concerning the procurement, contact Ted Zealley at 801-652-1321.

The procurement was initiated with a Letter of Interest, followed by a Request for Qualifications (RFQ). The RFQ contained general instructions, specific submittal requirements for the SOQ and standard forms to be submitted as part of the SOQ.

The RFP consisted of Instructions to Proposers (General instructions, instructions for technical proposals and price proposals, and forms and signature documents to be used); Contract Documents and Reference Documents. The Contract Documents included the Contract, General Provisions, Design Criteria, Utilities Requirements, Environmental Requirements, ROW Provisions, Maintenance of Traffic & Access Provisions, Construction Specifications, Public Information/Community Relations Provisions, and Drawings.

4.3 Did you use prescriptive or performance specifications? How were they developed?
Primarily prescriptive specifications were used. The performance specifications were generally in the street pavement sections.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

The proposal was part of the contract. It did not cause issues. A basic configuration was established as part of the contract. It laid out basic alignments, roadway widening, location of transit stations, and major transit system elements. The contractor was allowed to make changes to the basic configuration within limits specified in the contract. Essentially, the contractor could not make changes that required additional ROW, changes in final roadway lane configurations, or in certain items covered in an Interlocal Agreement among the project stakeholders.

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?
Yes. The documents were escrowed offsite. The Owner never needed to access these pricing documents.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.
No.

5. PROJECT MANAGEMENT

5.1 How was the project managed?
The Agency managed the project with aid from consultants who acted in positions of project director, technical and construction oversight managers and staff contract administration and utility coordination. The agency supplied the ROW procurement, legal, maintenance reviews, safety, and insurance/risk management staff and managers.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?
See 5.1 above. Agency and stakeholder and consultant employees served on the evaluation teams and selection committee. Outside legal staff and internal legal staff were used to review contract documents prepared by consultants. See also response to 5.1.

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?
The design was approved at midpoint of completion and at release for construction stages. A Project Director's statement was given to release the drawings and specifications to the field for construction. This release stated only that the owner had reviewed the drawing and that they were not aware of major flaws or deviations from standards or requirements. Design approval was not given until as-built drawings were received.

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?
The contractor supplied both QA and QC. The QA reported directly to the JV's Management. A quality plan was developed by the contractor and approved by the owner. The owner then audited compliance with the quality plan in the areas of design, construction, and public involvement. Several issues arose in construction quality. Generally these were observed by the contractor and corrected without comment. When identified and noticed by the owner, the corrections occurred without issue. Construction QA, including QA sampling and testing, was conducted by an independent firm retained by the contractor. One of the project stakeholders (UDOT) performed verification sampling and testing and independent assurance functions for UTA.

5.5 What conditions were required to be met before the start of construction?
Quality Plan and Safety Plan, Baseline Schedule, and reviewed design reviews that had received Project Director's "Statement of No Objection".

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

A partnering escalation process was established and generally followed. A DRB was available by contract but was never used.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

The bulk of the contract was a fixed price with force account type of work paid on time and materials basis within a provisional sum. A project contingency existed that was equal to 5% of the contract price.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, and schedule of values, unit prices, price centers or some other method?

Payments were made monthly based on a contract interim payment schedule and achievement of milestones in each of predetermined "price centers". The milestones were proposed by the contractor at the outset of the project and agreed to by the owner. Payment was made according to contract interim payment schedule as long as contractor met milestone dates.

6.3 When was mobilization paid and how were mobilization amounts determined?

Mobilization was paid as milestones within each of the individual price centers – not as a single up-front sum.

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

We paid for materials that were stockpiled but yet to be incorporated into construction. The payment was made if payment for materials was shown as a milestone.

6.5 Did you limit payment for equipment?

No.

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

Yes, 5%, with 50% to be released at substantial completion and the remainder at final owner acceptance.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

Yes and yes. The incentive fee was tied to the ability to run an active and effective public outreach program. A team consisting of the public along the route of the corridor was used to evaluate performance and suggest the level of award. The program was effective in connecting the contractor directly to the public affected by construction and gave them an incentive to work out issues. Incentive fee was also paid in increments throughout the project for meeting or exceeding schedule targets.

Liquidated damages were in the contract to allow the owner to recoup costs (+ administrative fees) if the owner had to perform work not done by contractor. This provision was not used.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

See 6.6 above

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

A max payment curve was established by the contractor with limited notices to proceed through the beginning of the contract based on the owner's ability to secure a FFGA. After unlimited notice to proceed, the payment was only limited by contractor's meeting designated milestones within schedule set by contractor.

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

Yes and yes. The paperwork to be supplied with the invoice is substantial. See Ted Zealley at 801-652-1321 for detailed information as to the list of submitted paperwork.

Information to be submitted with invoices included Progress Narrative, Quality Certifications for design and construction, safety report, report of wages and hours (for OCIP administration), photographs, subcontracting and DBE reports, quantity measurements for any unit priced items, etc.

6.11 What were the conditions to final payment?

Completion of work, submission of manuals and spare part, training completed, as-built documents, permits, quality paperwork, etc. The owner and contractor follow a process to check the delivery of these items off. At the completion, final owner acceptance of the project is given and final payment is made.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

A contractual completion date was set, but proposers submitted their own schedules that were used as a basis of selection.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

Yes. The amount of incentive was determined by UTA based on contract amount and importance of exceeding schedule.

Liquidated damages were determined based on additional costs that would be incurred by UTA and stakeholders if contractor did not meet contractual schedule.

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

A preliminary schedule was delivered at NTP plus 30 days and a detailed schedule was required at NTP plus 90 days. Monthly updates were submitted and reviewed for contract compliance. If unacceptable schedules were submitted, the contractor was noticed and required to correct. This was required on a number of occasions and corrected. If the contractor did not submit schedules in timely manner, UTA had the option to suspend payment on the price center covering "Preliminary and General Requirements" (approximately 15% of any invoice). It was not deemed necessary to exercise the suspension of payment provision.

7.4 Who owned the float?

The contractor owned contractor-generated float and the owner any float they created.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

Yes, a failing audit of the monthly schedule review, and it was never required as the contractor completed very early.

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date: none. Proposal date: none

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

24 parcels. All very small. The contractor was not a player in the acquisition process. All were acquired or access was granted in time for construction needs.

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

Yes and none was identified.

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

Mapping of the known utility conflicts was developed along with all known utilities in the construction corridor. Incorrectly identified utility relocation costs was borne by the owner if the utilities were actually outside a range of error specified in the contract.

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

They were negotiated prior to award.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, streetlights, irrigation or other facilities not included in the definition of utilities?"

Wet and dry utilities (water, cable television, fiber optic, electric power, sewer, phone, gas, storm sewer, ATMS)

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Due to uncertainties in the actual scope of work, relocation of dry utilities was done on a time and materials (force account) basis within an allowance established in the contract. This required quite a bit of time on the part of the contractor and owner to administer. Would probably pay based on unit prices and quantities in the future if scope of utility work was not sufficiently certain.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

We did. Weather delays were specifically excluded.

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

No

9.4 How were differing site conditions addressed?

The owner held the financial risk within defined limits. The contract specifically excluded some items from differing site conditions, such as changes in moisture content and existence of old trackwork.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

If encountered, work covered under Change Order with payment usual on time and materials basis.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

Both. Some for subgrade that was under the LRT trackway was unsuitable material. Each area was reviewed by the Owners and Contractors geotech representatives to designate the corrective actions and the owner paid for the actions. H and H materials were noticed at two locations in the corridor. The contractor stopped work while the areas were tested to determine the nature of the issue and the appropriate corrective action. Once the correction was complete the contractor restarted work and a CO was approved covering time and cost of remediation.

9.7 What permits/approvals were obtained by the agency before the proposal due date?

Environmental, and Interlocal agreements with the project stakeholders.

9.8 What permits/approvals were the contractor's responsibility to obtain?

All construction related permits and approvals.

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

No.

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.

A scope of work was delivered to the contractor after which they priced the work. The owner reviewed the price proposal against independent estimates and began negotiations. A final cost was negotiated, and the owner gave notice to proceed or agreement was not reached and another direction was taken.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.

The contractor submitted a written request for change. The owner evaluated the request to determine if the change was covered under the contract and had merit. If so the contractor was requested to submit estimate of cost and time impacts. Any adjustment was negotiated and covered by Change Order.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?

Yes. Markups were preset in the Contract.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?

Yes, with saving generally on a 50/50 basis. Two proposals were accepted.

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.

Most LRT systems components had a Two-year warranty period. Pavement work had a two-year warranty, as did landscaping. All other work had a five year warranty.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?

No. See following wording from Contract Documents, Part 3:

No Limitation of Liability. The foregoing warranties are in addition to all rights and remedies available under the Contract Documents or applicable law, and shall not limit Contractor's liability or responsibility imposed by the Contract Documents or applicable law with respect to the Work, including liability for design defects, latent construction defects, strict liability, negligence or fraud; provided, however, that upon expiration of the Warranties, Contractor shall have no further liability to UTA for patent construction defects.

11.3 Was a warranty bond required? If so, how was the amount determined?

A warranty bond could be substituted for the performance bond at final acceptance. The amount was set at 25% of the performance bond.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

Has not occurred yet.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

They maintained all facilities that were in the constructed corridor prior to final owner acceptance at which point the warranty period begins and routine maintenance shifts to the owner.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

No.

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

Approximately 41.6 %. DBE participation was 11.9%.

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

The policies are consistent with the agencies overall DBE requirements. The only necessary change was that DBE participation did not have to be determined at time of proposal but was tracked throughout the course of the contract.

12.3 How were EEO requirements addressed?

Contract contained percentage of minority/women to be met during course of contract.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

The contractor has provided strong key personnel in the construction arena but had difficulties in understanding the nature of the need for the manager of engineering design. This position did not function as required through the project life. The Manager of Construction and Project Manager positions was extremely effective and remained intact through the life of the project. This was crucial to success of the project.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

The program was insured through an OCIP.

13.2 What insurance was provided by the contractor?

Contractor provided professional E&O insurance, off-site workers compensation, and automobile insurance.

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

Yes

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

Yes, the owner provided indemnity.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

Yes. Damages specifically excluded consequential damages. A Cap of \$5 million in damages was included.

The following language appears in Contract Documents Part 3, Contract:

“Contractor’s Limit of Liability. Contractor’s liability to UTA for damages resulting from breach of this Contract shall not exceed the sum of (a) all those costs reasonably incurred by UTA or any party acting on UTA’s behalf in completing or correcting the Work or having the Work completed or corrected by another Person and (b) the amount of \$5,000,000 (which amount shall specifically include any Damages paid pursuant to Section 16). For purposes of this Section 16.5, costs and expenses as described in Section 18.6 shall be considered costs of completing and correcting the Work.”

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

No

WSDOT

DESIGN BUILD INDUSTRY PRACTICE SURVEY

Agency: Washington State Department of Transportation

Name of individual: Jeff Carpenter, PE

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Date : 14 Jan 2002

1. GENERAL INFORMATION

1.1 How is design-build used by your Agency?

Currently WSDOT has utilized Design Build on one Pilot project utilizing a Best Value Approach. WSDOT has also utilized a QBS selection on the Public/Private Venture of constructing the Tacoma Narrows Bridge

1.2 Provide names and phone numbers of other individuals who could be contacted for additional information about the Agency's design-build program.

1.3 Describe the Agency's design-build program. What projects were completed under the Agency's design-build program? What projects are in process? What future projects are anticipated? What were the types and sizes of the projects?

WSDOT recently received legislative authority to utilize design-build on publicly funded transportation projects. WSDOT did a nationwide research effort and created a Design-Build Guidebook utilizing best practices found throughout the nation. Currently, one 22 million dollar pilot project is underway (60% complete). Pending funding, WSDOT will likely utilize design-build for corridor level projects in the Seattle-Area (projects ranging from 200 million to 2 billion)

1.4 Why did the Agency initiate its design-build program?

The primary draw of design-build was a faster delivery process.

1.5 Was enabling legislation required for the design-build program? If so, what was the process followed to get legislation passed? Please provide a cite for the enabling authorization and regulations as well as a copy of any relevant internal policies and procedures.

Enabling legislation was required. The initial legislation required WSDOT to develop a process and construct a number of pilot projects. The legislation has since been changed to allow WSDOT to utilize design-build on any transportation project greater than \$10 million.

WSDOT initially got legislative authority in 1998 that was codified at RCW 47.20.750 through 775. These statutes required the use of the Department of General Administration's design build process set out in RCW 39.10.050 if a request for proposals was used, and this is what WSDOT used in its pilot project. These statutes expired July 1, 2001. Last year's legislature enacted new design-build authority for WSDOT, which is found at RCW 47.20.780 and 785. The new legislation differs from the former in that it is not limited to the two pilot projects, does not require use of the RFP process in RCW 39.10, and eliminated a provision about sureties not being responsible for damages attributable to the design aspects of a design-build project. The new legislation did not address sureties. The elimination of the requirement to follow RCW 39.10 does not mean that WSDOT cannot use RFPs – they just don't have to follow all of the steps in RCW 39.10, part of which included a public notification and review process prior to the decision being made to use design-build. WSDOT has much more flexibility under the new statutes to develop its own program.

1.6 Did you face opposition to design-build from contractors, consultants or others?

What were their main concerns with design build? How did you deal with those concerns?

During WSDOT's initial nationwide survey consultants and contractors were brought into the process. Concerns voiced were addressed within the design-build guidebook.

During the recent legislation the AGC voiced concerns over the minimum size of a design-build contract. A \$10 million minimum size clause was incorporated into the legislation.

As WSDOT progresses through the pilot project and begins work developing the larger urban corridor design-build projects representatives from the consulting and contracting communities have been brought into a design-build task force to review the existing guidebook and make recommendations on how to modify the existing process.

1.7 Has the Agency's design-build program been successful (e.g. has the program met its goals)? What benefits have resulted from use of design-build?

At this time, WSDOT feels that design-build is an important tool in delivery of our transportation program. The two primary benefits which WSDOT anticipates from design-build are a faster delivery timeline coupled with a lower WSDOT staff requirement.

1.8 What are the criteria used to decide whether design-build is appropriate for a particular project?

The first step WSDOT asks project manager to take is determining what benefit they wish to obtain by utilizing design-build.

During the initial scoping of a project a risk allocation matrix is laid out. In reviewing the risk allocated to the owner (WSDOT) the decision is made how far the initial design must be taken to satisfactorily address these risks. Should the time required to address the risk extend beyond the time required to fully design the project then the decision would be made to utilize design-bid-build.

1.9 If available in an electronic format, please provide a copy of your procurement and contract documents, as well as evaluation procedures. Are there any documents analyzing or reporting on the results of your design-build projects? How can we get a copy?

<http://www.wsdot.wa.gov/designbuild/db/>

1.10 Do you plan to proceed with additional design-build projects? If not, why?
Yes

2. PROJECT BACKGROUND

2.1 Identify your project(s) and design-build team member(s) for each project.

Pilot Project - \$22 million grade separation: One Project Manager, One assistant, one inspector - Support Groups (Bridge, Geotech, materials lab, etc) are utilized as necessary.

2.4 What was the initial contract price for each project? What was the final contract price? Please describe the reasons for any price change.

Ongoing - No significant cost variation to date

2.5 What were the Agency's goals (e.g. budget, minimize disruption, etc.)?

The legislative goal on the pilot project was to minimize budget and time. WSDOT feels that the goal of minimizing total project delivery time will be realized.

2.6 Did design-build help the Agency meet its goals? How?

2.7 Describe the process used to identify risks and minimize the impact of risks.

Early on in the process a risk allocation matrix is created. This risk matrix is continuously modified as additional information becomes available.

2.8 Do you believe that design-build accelerated the schedule for project delivery? If so, what was the time savings and how was this determination made?

Yes, at this time WSDOT does believe this to be the case. We have contracted with an outside consultant to evaluate our process and an independent cost estimate and independent time estimate will be generated at the completion of the project.

2.9 Do you believe that design-build resulted in a higher or lower total project cost than traditional delivery methods? Please provide an explanation.

Unknown at this time. Preliminary estimates show the initial cost was higher than a Design-Bid-Build project but cost growth (to date) has been lower than for a standard project.

2.10 How was the project funded?

The current pilot project was funded out of the safety improvement program. Future large corridor projects will require special funding sources.

2.11 Did funding issues affect the procurement process or contract terms? If so, please explain.

Yes, currently, WSDOT breaks out funding for Design, Right of Way Acquisition, and Construction. Further, funding is tied to a biennial budget. Entering into a multi-biennium contract presents new funding challenges.

2.12 Was the project phased or segmented? If so, please provide a general explanation of how that was addressed in the procurement and contract documents.

This project did not include a WSDOT required phasing sequence. There is a required winter holiday shutdown to avoid congestion during the holiday shopping season (project is directly adjacent to major retail shopping center)

2.13 Identify stakeholders interested in the project and what steps were taken to ensure that their needs were met.

Vancouver Mall - Concerned over retail business health. Limitations were put on both the number of lanes required to be open as well as a winter shutdown period.

City of Vancouver – Performance Specifications were provided to the City to ensure that the end result would be acceptable to the City. Some prescriptive specifications were included within the contract.

3. PROCUREMENT PROCESS

3.1 Describe the procurement process used. (pre-qualification? shortlisting? industry review? pre-approval of alternative technical concepts? preliminary proposals + discussions + final proposals? BAFO? negotiations?) How much time did each step take?

WSDOT utilizes a two step process. The first requires firms/joint ventures to submit a Statement of Qualifications. The number of firms is then shortlisted from three to five (usually three).

During the development of the RFQ and RFP industry is involved in commenting on the proposed project. All comments are subject to public disclosure.

The firms are then invited to submit a Best and Final Proposal (stipend provided).

During the development of the Proposal firms can ask questions of WSDOT regarding solution specific alternates without the information being shared. We did not have requests for disclosure of these documents during the proposal development period, but took the position that these documents would be exempt from disclosure under the state Public Records Act as proprietary documents whose disclosure would be unfairly advantageous to private parties and detrimental to the state.

WSDOT will be investigating the use of Proposals / discussions / Final proposals in future contracts.

3.2 Was the industry review process (if used) beneficial? Please describe what changes were made to the RFP and contract documents as a result of the industry review.

The industry review process is vital to a successful project for WSDOT. The sharing of ideas in a public forum is a cause of concern to design-builders seeking a competitive edge.

3.3 How many firms were shortlisted? How many proposals were received?

WSDOT guidance is that the shortlisted firms be limited to three unless there is a specific reason for expanding the field. In general, proposals WSDOT has reviewed have been similar and it is unlikely that expanding the field would produce dissimilar results. No firms have backed out of submitting an RFP to date.

3.4 Describe the proposer selection process (e.g. low bid, best value, describe how best value was determined).

Proposers are selected based upon a combination of a proposal price and technical score RCW 39.10.050 sets out the process that was followed. See <http://search.leg.wa.gov/wslrcw/RCW%20%2039%20%20TITLE/RCW%20%2039%20.%2010%20%20CHAPTER/RCW%20%2039%20.%2010%20.051.htm> for an electronic copy of RCW 39.10.051, which I believe is the same as RCW 39.10.050 but with a new sunset provision.

3.5 If negotiations were part of the process, were they useful? Please explain.

Negotiations have not been used to date. RCW 39.10.050 allowed negotiations, but my recollection is that there was little left to negotiate after the proposer was selected.

3.6 If the process included final proposals or BAFOs, please explain why, and describe differences between the final proposals/BAFO and the initial proposals.

WSDOT has only used a one-step Best and Final Proposal

3.7 Did the proposers have the ability to deviate from defined technical parameters in their proposals? What process was followed to obtain Agency approval of deviations? Were the proposed deviations beneficial? Please explain.

During the development stage for the RFP competitors had the opportunity to submit deviation requests from the RFP. These requests were handled confidentially. After the contract was awarded, a design-builder can still request a deviation/change through WSDOT's change order process.

Change management must be included in the proposal. To assume that all assumptions made at the 30% design level will hold true is not realistic.

3.8 Were stipends provided to the unsuccessful proposers? Who was eligible to receive them and what were the amounts?

Yes, WSDOT provided a \$50,000 (22 million project) stipend to all non-successful/responsive proposal submittals in the RFP process.

No reimbursement was made for the SOQ preparation.

3.9 Describe the proposal review process. How much time did the Agency have to review proposals? How many reviewers were involved in the proposal review process?

WSDOT's review process involved support groups from numerous disciplines. We had three weeks to review all proposals and produce a technical score.

3.10 Describe how you evaluated the price and technical proposals in making the selection. (relative weights assigned to price and technical proposals, method used to combine price and technical score, use of adjectival scores or formulas, present value, how options were considered, was schedule a factor, fixed price-best proposal)

Price and technical score were combined. The technical score was taken and divided by the price component. The highest combined score was awarded the contract.

3.11 Were there any protests? If so, please describe the circumstances and results.

There were no protests

3.12 Was a Record of Decision required for your project? If so, when was the ROD issued relative to the procurement and contracting process? If the ROD was issued after the RFP was issued or contract awarded, how did you go about incorporating the final requirements into the contract?

A ROD was not required on the pilot project. WSDOT policy is now to require the ROD prior to issuing the final RFP.

3.13 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

The initial pilot project was developed too far. WSDOT will attempt to focus more heavily on performance specifications in the future. Also, WSDOT will continue to progress out of project management role and into a more audit focused role on future design-build projects. Also, WSDOT will share scoring methodology with proposers on future contract.

4. DEVELOPMENT OF PROCUREMENT PACKAGE

4.1 What level of design was completed prior to issuance of the procurement package?

30-40%

4.2 What were the components of the procurement package and how is it organized (instructions to proposers, proposal forms, signature documents, general provisions, special conditions, technical provisions).

Whenever possible, WSDOT treated the design-build pilot as a standard contract. There was a modification to the bid form to include WSDOT's incorporation of a technical score.

Instructions to bidders included instructions for how to format the proposal and what information was to be provided. DBE documentation was modified to allow a contractor to state it's intent to meet the contract goal in lieu of entering into binding contracts with subcontractors on work which was yet to be completed designed and scheduled.

4.3 Did you use prescriptive or performance specifications? How were they developed?
Whenever possible, performance specifications were used.

4.4 Was the proposal made part of the contract? Did the characterization of the proposal as contract document (or not a contract document) create any issues? Did the contract contain limitations on the contractor's ability to deviate from identified configuration of the project? (For example, did the contract identify a "basic configuration" that was mandatory.) What restrictions applied?

The technical and price proposals do become part of the contract. The inclusion of the technical proposal did not initially create any issues. What was promised in the technical proposal is considered contractually binding. This has created frustration on the design-builders part when they are held to commitments made at the 30% design-level, which cannot easily be met at the 100% design level. WSDOT is reviewing this situation and attempting to come up with language that ensures WSDOT obtains the final product it desires without requiring an unacceptably high contingency in the design-builder's future price proposals.

4.5 Did you require proposers to submit backup for their price? Where were these documents kept? Were they reviewed during the contract? How did you utilize this information?
Bid documentation was required to be submitted and is kept in escrow. It has not been utilized to date and it isn't viewed as likely to come up.

4.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

The single point of responsibility for design and constructability.

5. PROJECT MANAGEMENT

5.1 How was the project managed?

The project is managed by an Area Engineer. This is the expected level of management for a project of this size. WSDOT's intention is to perform over-the-shoulder review and audits with field inspection focusing on high risk items through the use of witness and hold points. WSDOT controlled materials testing was at the verification level.

5.2 What roles were played by the Agency and its employees during the procurement, design and construction periods? Consultants? In-house/outside lawyers?

During procurement WSDOT was solely responsible for developing the RFP and evaluating all proposals. During design and construction WSDOT performed over-the-shoulder and compliance reviews of the design. The RFP was developed with the input of outside counsel and WSDOT's attorneys in the Attorney General's Office.

5.3 Describe the design review process. At what stages of design were formal submittals required? Did the agency provide a formal design approval?

WSDOT did not provide for at-risk construction. Design submittals for components had to be at 100% prior to beginning construction. All work had to be reviewed by WSDOT prior to being released for construction.

5.4 Describe the quality assurance/quality control process. Did you have any issues with design quality? Construction quality? How did you resolve them?

WSDOT required an independent profit center to be responsible for QA testing and inspection. WSDOT provided verification of testing as well as providing for a number of witness and hold points

at critical areas. Overall, the quality of the project is equal or greater to a standard, WSDOT inspected project.

5.5 What conditions were required to be met before the start of construction?

Design had to be at 100% and released for construction (completed internal design QA process controlled by design-builder).

5.6 Has a special process been set up for resolving design-build disputes? If so, please describe your standard dispute resolution process and how it was changed. Also identify the reason for the changes.

Design-build disputes are handled through WSDOT's construction disputes procedures. A dispute resolution board has also been set up for this project (standard for projects of this size) in the event that WSDOT and the contractor do not agree. To date, no serious issues have arisen.

5.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

WSDOT perhaps required too much detail within the proposal. There are a number of areas/items which we're promised in the design-builder's technical proposal which do not add significant value but are now required contractually.

6. PAYMENT

6.1 Was the contract price fixed or based on unit prices (or both)? Did you use allowances for certain elements? Was there a contingency pool?

The contract utilized a very small number of unit price items coupled with the Lump-Sum item. There was no contingency pool established.

6.2 Describe the invoicing and payment process. Were payments based on progress, milestones, schedule of values, unit prices, price centers or some other method?

Invoicing has been based upon a mutually agreed to lump sum breakdown.

6.3 When was mobilization paid and how were mobilization amounts determined?

Mobilization was paid at 50% for 5% completion and 100% for 10% completion of the contract work.

6.4 Did you allow payment for materials not yet incorporated into the work? What were the conditions to payment?

Payment for materials on hand was paid for on this project. Conditions included actual purchase of the material and agreement that the materials would ultimately be incorporated into the project.

6.5 Did you limit payment for equipment?

???

6.6 Did you withhold retainage? What percentage? At what point was retainage released?

Retainage was held on this project at 5%. There is no provision on the current contract to release the retainage early. This option will be explored on future contracts. Retainage is required by RCW 60.28.011.

6.7 Did you have an award fee/incentive program tied to contractor performance (excluding schedule)? Were there disincentives (liquidated damages) for failure to perform (excluding schedule)? Please describe.

There was no award fee or incentive program provided in this contract.

6.8 Did the contractor have the right to substitute a letter of credit or securities for retainage? How was this done? Has it presented any problems for the Agency?

No

6.9 Were there any limits on the total amount payable at any point in time (i.e. was there a maximum payment curve)? How were these limits determined?

A payment curve was not provided on this contract. It will be considered for future projects of suitable size.

6.10 Are subcontractors entitled to mechanics liens or stop notices in your state? Does the Agency have the right to withhold payment if any were filed? What paperwork is required to be submitted with invoices?

No

6.11 What were the conditions to final payment?

For final payment to be made the project must be formally approved and accepted by WSDOT for design conformance, construction quality and documentation.

6.12 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

7. SCHEDULE

7.1 Were the completion deadlines fixed in the RFP or by the proposal? If the latter, how was schedule factored into the evaluation process?

The completion deadline was based upon working days as established in the proposal. The schedule was factored into the technical component score (10%). The guidebook has been revised to require the proposers to establish the contract time with duration being scored in the technical component.

7.2 Did the contract provide for early completion incentives/liquidated damages/stipulated damages? How were the amounts determined?

The contract has liquidated damages. These damages are based upon WSDOT's standard liquidated damages formula.

7.3 Please describe the required schedule submittals (including proposal requirements as well as post-award requirements.). What remedies were available to the owner if an acceptable schedule wasn't submitted on time? Have you ever exercised those remedies and if so were they effective?

The schedule was required to be submitted by the design-builder. It became apparent that there was no way to submit an accurate 100% schedule early on so the level of detail during the second phase of the project was minimal. No problems have occurred.

7.4 Who owned the float?

First come-first served. In the event of a delay on a non-critical item WSDOT would only be liable for direct impacts.

7.5 Was a recovery schedule required if the project fell behind schedule? What triggered the requirement? Was this requirement ever enforced?

N/a

7.6 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Allow the design-builder to set not only the completion date but the beginning work date. Allowing flexibility on both ends could ultimately reduce the public impact from the construction.

8. RIGHT OF WAY/UTILITIES

8.1 What percentage of the ROW was in hand as of the date the RFP was issued and as of the proposal due date?

RFP date: 100%

Proposal date: 100%

8.2 How many parcels needed to be acquired post-award? What role did the contractor play in the acquisitions?

None - Should additional R/W have been required then WSDOT required six months (from the date of an approved R/W plan) to acquire the R/W

8.3 Did the RFP ask proposers to identify any additional property required? Did any proposers identify such property?

None was identified

8.4 Please describe steps taken to identify utilities prior to the proposal due date. How was the risk of unidentified/misidentified utilities allocated?

Utilities were identified by WSDOT prior to the RFP. The information was shared with the design-build teams. This meant WSDOT incurs responsibility for location of utilities.

8.5 Did you negotiate master utility agreements prior to contract award? If any such agreements were not finalized prior to the proposal due date, how were they incorporated into the contract?

Utility agreements were negotiated prior to construction. A major concern to the design-builders was who would control utility re-locations.

8.6 What is included in the definition of utilities? What is your approach to relocation of storm drains, street lights, irrigation or other facilities not included in the definition of utilities?"

These were included in the lump-sum design-build price. Any independent utility provided is included in WSDOT's definition of utilities. Storm drains and lighting are generally considered integral to the roadway system.

8.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

Provide a thorough subsurface utility condition investigation. A design-builder made the assumption that, since WSDOT made no mention of deficient/aging utilities that all underground utilities were sound. This created some concern regarding some older sewer pipe directly adjacent to a large fill. The design-builder proposed soil densification and the utility company expressed concern regarding the soundness of the sewer line. Relocation would have provided a delay to the project.

9. RISK ALLOCATION

9.1 Did you allow time extensions for force majeure events? Were there any exclusions? Please describe the exclusions.

Yes

9.2 Did you allow a price increase for force majeure events? What parameters applied? What was the reasoning behind allowing/disallowing a price increase?

Price increases would be allowed in the event of a force majeure event. WSDOT has traditionally taken responsibility for the ground and any "acts of god". This allows the contractor to bid solely on the work described. The program savings are enough for WSDOT

9.3 Did any force majeure events occur during the course of the project? If so, what happened?

no

9.4 How were differing site conditions addressed?

The standard language/responsibility (WSDOT) was provided in the contract. These are found in WSDOT's standard specifications at section 1-04.7.

9.5 How were contaminated materials/contaminated groundwater/hazardous substances addressed?

WSDOT owns the risk for unidentified contaminated materials/contaminated groundwater/hazardous substances within a project. If hazardous substances are identified during the initial site investigation the mitigation/treatment would be handled on a case-by-case basis.

9.6 Were differing site conditions or unforeseen contaminated/hazardous materials encountered during the course of the project? If so, what happened?

no

9.7 What permits/approvals were obtained by the agency before the proposal due date?
WSDOT obtained the environmental permits with the exception of the DOE 401 permit and the Corps of Engineers Nationwide 404 (wetlands) permit. The City of Vancouver also signed onto a local agency agreement prior to the RFP being issued.

9.8 What permits/approvals were the contractor's responsibility to obtain?
The contractor was responsible for obtaining the permits which they would normally be required to obtain. Haul permits, grading permits, etc.

9.9 Was the contractor given responsibility for environmental mitigation measures? Please describe. Were there any non-compliance problems?

No

9.10 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

10. CHANGE ORDERS

10.1 Describe the process followed for changes directed by the owner.
The contractor was asked for a ballpark price. The price was found to be acceptable and WSDOT directed the design-builder to continue the design and develop an final price. The final price was determined to be acceptable and the contractor was directed to incorporate the modification into the finished product.

10.2 Describe the process followed for contractor claims for additional compensation/time extensions.
Any request for additional time would mirror that on a standard design-bid-build project with defined conflict escalation until a resolution was obtained.

10.3 Did the agency have the ability to direct performance of work on a time and materials basis? Were the markups for such work pre-set? If so, what were the markups? If not, how were the markups determined?
WSDOT does have the ability to direct work on a force account basis. Designer Costs would be incorporated into the formula but markups have not been pre-agreed to at this time.

10.4 Did the contract provide for value engineering? How were savings shared? How were ROW savings addressed? Were any VE proposals accepted?
The contract does not provide for design-build. However, WSDOT does have a Cost Reduction Incentive Proposal in which WSDOT shares the savings equally with the contractor. It has been agreed that this would be the mechanism which would be utilized on the current contract.

10.5 Were there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

11. WARRANTIES/MAINTENANCE

11.1 Did the contract include warranties? Describe the scope/term.
Yes, a five year warranty is required for the asphalt concrete pavement. Various measurable standards are included in the warranty language.

11.2 Did the contract provide that the warranty is the exclusive remedy for defects or otherwise limit liability for defects following expiration of the warranty period?
?? The contract provides that WSDOT accepts the design and construction at the end of the project. With the exception of the pavement warranty at that point any construction defects become WSDOT's

problem. The asphalt concrete pavement becomes WSDOT's sole responsibility at the completion of the warranty period.

11.3 Was a warranty bond required? If so, how was the amount determined?

No bond was required for the pilot project. Performance bonds may be required on future projects.

11.4 Did the Agency consider requiring the contractor to perform warranty work or correct defects post-warranty? Please describe the situation and how any issues were resolved.

This was considered during the development of WSDOT's design-build program. Contracting out language in the current statutes precluded this from being an option at this time. It may be considered on future projects.

11.5 What were the contractor's maintenance obligations prior to completion? At what point did the obligation to maintain shift to the Agency or third parties?

The contractor is responsible for maintaining the site throughout construction. WSDOT provides for snow removal.

11.6 Did the scope include post-completion maintenance? If so, how was payment made for such work?

The scope did not include post-completion maintenance.

11.7 Was there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

12. SUBCONTRACTORS/DBE/EEO/KEY PERSONNEL

12.1 What percent of the work was subcontracted (excluding any subcontracts with equity participants and their affiliates)?

50% (including design effort)

12.2 Were any changes made to the Agency's standard DBE policy to address the design-build nature of the project? If so and if available electronically, please provide a copy of the design-build policy. Did the contractor achieve the DBE goals?

WSDOT did not require condition of award documentation at the time of submittal. It is not reasonable to expect a design-builder to accurately identify the quantity and time an effort will be required. The design-builder must sign a document stating that they either will meet the goal or submit documentation showing how a good faith effort was done.

12.3 How were EEO requirements addressed?

Training hours were required on this project. The design-builder submitted a training plan for WSDOT review and approval.

12.4 Describe your experience with capabilities and turnover of contractor key personnel.

Turnover has not been a large issue on this project. Should a key person leave the project WSDOT must approve the replacement individual.

12.5 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.

13. INSURANCE/BONDS/INDEMNITIES/LIMIT ON LIABILITY

13.1 What insurance was provided by the Agency?

None - WSDOT may consider an OCIP on future projects.

13.2 What insurance was provided by the contractor?

WSDOT required site specific liability insurance. All design-build groups voiced frustration over this item and felt it added significant cost to the product without a benefit to WSDOT.

13.3 Did you require 100% bonds? If not, what amount was required and how was that amount justified?

Yes

13.4 If the contractor was responsible for cleanup of hazardous materials found on site, did the Agency provide a CERCLA indemnity to the contractor? If not, did the contract include any other provisions intended to provide the contractor with assurance that it will not have liability under CERCLA? Please describe.

WSDOT has historically taken responsibility for hazardous materials and cleanup within the R/W. Should any hazardous materials have been encountered on this project then WSDOT would have taken the lead on the investigation and mitigation of the material. In the past, in design-bid-build contracts, WSDOT has provided indemnification to the contractor where the contractor has been asked to clean contaminated materials that it did not cause. If this situation were to come up in a design-build project, the same type of indemnification would likely be provided.

13.5 Did the contract include an overall cap on liability or limitation on consequential damages? Please provide language.

No.

13.6 Is there anything you particularly liked or would do differently for your next design-build procurement? Please describe.